

SEQUENCE LISTING

<110> Sun, Yongming
 Recipon, Herve
 Ghosh, Malavika
 Liu, Chenghua

<120> Compositions and Methods Relating to Colon Specific
 Genes and Proteins

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<150> 60/244,717

<151> 2000-10-31

<160> 250

<170> PatentIn Ver. 2.1

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 <213> Homo sapiens

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<213> Homo sapiens

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<223> a, c, g or t

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<210> 15
<211> 904
<212> DNA
<213> Homo sapiens

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<220>
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<222> (281)
<223> a, c, g or t

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<220>
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<223> a, c, g or t

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<223> a, c, g or t

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<220>
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 <223> a, c, g or t

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 aggaaaacag taaatcttta atggaacttt ttagcaatta tgacaaaaag aatggaaaaa 180
 tgttttaaca tatataaaag gctagacgtt tatcgccaaa tagtatctaa aggtcataga 240
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 aagaactcat tatataccaa agtaggagct tgctgacact gataatgctt tatttagttt 420
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 tttntaacc gctaataata taaataccat actattaaca atctagaaaa atgattctgg 840
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 ctga 904

<210> 16
 <211> 984
 <212> DNA
 <213> Homo sapiens

<400> 16
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 acttgtggtc attgagcctc ctgtgtaaag caccgacgtc attctgtagt tgtcatcact 180
 gtattcaggg tgattctaca cgtaggagtg agcatttgac agcttccatg tcttctagt 240
 cggctgagaa ttacatatt aagatacaca ttatttatta tcaattactt tcctgtttca 300
 atgtccattt agagcactaa aaatatcttt gtaggtagtgt gatattactt atgaatttta 360
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tcacatcttg gcttttatac ttacagctgt ataaccgtag acaatctatc taccctctgg 660
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tagtttgccc tcactccatt ccct
984

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<210> 17
<211> 429
<212> DNA
<213> Homo sapiens

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<400> 17
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gcctcctgca tcaacttcct gatggagagt gtatgaatgc aaaagctcct cccttagcac 180
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ttaaatacca gagtttatgg ctttttaaaa ataacctctc acctatttat caaaagctcc 300
ttctaaataa tatttacaac aacaacaatg ataatggcta ctatctagta tttccatttt 360
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gccgtctta
429

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<210> 18
<211> 734
<212> DNA
<213> Homo sapiens

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<400> 18
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agaaaaataat tttctagaat ttgaagaaaa atcttaaaac atttgaaatt ctttggttatg 180
atgactaata taacgaatag cactcaggtt tatcaaatac taacattttt ccatatttgt 240
tatagaattt ttttccatat ttgctacaga aataatttct ttatatatat aatacatatt 300
tgaacactga ttttacttga tacattaata taatgctgat gtgctgagat gaataaatca 360
aagaacctct tggagctctt ggtgtgcaat aagcatagtt aacgaatata aaataagtga 420
tattttctag aaaataaata ctggtctaca atgccttctc tgtcatttca agtctctaa 480
aaagatctga aaatccaatg ctttttaaaa ataaaattac ggtaatctca tttggccaca 540
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734

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<210> 19
 <211> 1184
 <212> DNA
 <213> Homo sapiens

<400> 19
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 agtctgcttt atcattacat taacatttat gaaagacttg ctggtatcat tggcttagcg 180
 attatttttc catctagatg ctttttttaa agaaatgaag agaatatgta atgtttttaa 240
 tgtacatttt agtttgattt aaattttaat caaggatttt tattttatac attacatact 300
 gatcactgtt ttatgttaac tctggctcta ataaacagaa aataacaatt tgggaatatct 360
 acaacaatga gagctcgagg taaaatatag cataaataag acatatatgt gtatgaactg 420
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 aataatttct ttatatatat aatacatatt tgaacactga ttttacttga tacattaata 780
 taatgctgat gtgctgagat gaataaatca aagaacctct tggagctctt ggtgtgcaat 840
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 aagatattta tttctcttat ttattagtga atattcatct ttcactacag aaataactaac 1080
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<210> 20
 <211> 550
 <212> DNA
 <213> Homo sapiens

<400> 20
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 gcacaggggc tggggagggg aaggctgccc aacccccgtt ttccctttgc agatgagcat 180
 tctccaaatc catgtttacc cagtcctcct taatgctgcc ttccaaactg tcagcgggtg 240
 ctaaaaagca cacattagga tgaattagaa catgccaggc tgcaagggcg ggtgtcatcc 300
 cagaactcac agagcacgtt gagggctcag ccgctcagcc acatctttag gtcccaccag 360
 catctcccc caggcatgga cctccccaat ttaccctgtg aaggctgcat ggagaagatg 420
 caggtcttag gaacagccag catcaccaga ggtgccactt agtgagtacc cagtgggctc 480
 ccaacaccgt gctgagctcc cagtgggaga accggaaccg tctgctgtt ctctgttgta 540
 ttccagcatc 550

<210> 21

<211> 599
 <212> DNA
 <213> Homo sapiens

<400> 21
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 tgcagctttg ctccaaagca cacactggca gaccttggcc agatgcctgg cacaggggct 180
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<210> 22
 <211> 618
 <212> DNA
 <213> Homo sapiens

<400> 22
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 attatcaatt tgtaagtata aaaactgcaa gtatagttgg tagttgataa gaaaggtaga 120
 taataaaaact taaaagggat ggacacagat tgaaaaaggc cttgagtgcc aagacaagag 180
 ctctgaactt taacaggcac tggaaaccgt cataggtctt aggtaggaat atgctgtgct 240
 cccaccatct taattagggtc ttatggagggt ttgatagcaa gagggtagga atatcattta 300
 gcaggctact gcaagtatcc aggtgaaatg tacagagggtt ttgaactagg ctgctgggga 360
 ggggtgcagag aagaaatatt ttggaaataa aatggacaga aagtgtataa atggataaag 420
 agaggaatag aactgacacc aggccttcaag cctgatgcct gagaataaag gtgtaattat 480
 gaaggggaatc caggaagaca tggaaagagt ggttggagta aggttaaagt gatagtttta 540
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 cattgaaaat atgagttt 618

<210> 23
 <211> 711
 <212> DNA
 <213> Homo sapiens

<400> 23
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 tattttttat attttctttg cttgtaaaga gttattatca atttgtaagt ataaaaactg 180
 caagtatagt tggtagttga taagaaaggc agataataaa acttaaaaagg gatggacaca 240
 gattgaaaaa ggccttgagt gccaaagaca gagctctgaa ctttaacagg cactggaaac 300
 cgtcataggt cttaggtagg aatatgctgt gctcccacca tcttaattag gtcttatgga 360

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ggtttgatag caagagggta ggaatatcat ttagcaggct actgcaagta tccagggtgaa 420
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taaaatggac agaaagtgt taaatggata aagagaggaa tagaactgac accaggcttc 540
aagcctgatg cctgagaata aagggtgtaat tatgaaggga atccaggaag acatggaaaag 600
agtggttgga gtaagggttaa agtgatagtt ttagattggg ttattttgac gttgaagtgt 660
tgaccaactt cttaagttaa aatgtgcaac agtcattgaa aatatgagtt t 711

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<210> 24
<211> 547
<212> DNA
<213> Homo sapiens

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<400> 24
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aacaacaaaag acgtatttgt aatcactccc atgagtctac tttgcagcaa gaacatgcat 180
tttggaaatta ttcccatcct gtgtgctgaa tactggatgt gactcttagt cagctctgtg 240
acccttgtca agtaacttaa gctctttgat catcagcttt gtcactctgta aaatgggcat 300
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gcacaatggc ctaaaaaagg aaggcactga atcattctca ctcccctacc ttcagtctga 420
tcctgctctt attgtcaaaa ggataatttc aattttaata gatctgagat cctgtttttt 480
aataataatt ttatagaatt tttcatttta tggcaggcac agggctcatg cctgtaatcc 540
cagcact 547

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<210> 25
<211> 549
<212> DNA
<213> Homo sapiens

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<400> 25
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taggaagaac ggaggcacct gagttcacca ggtgggacga acctggcctt agcacggaat 180
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aaacagtgag gctgagtatg tggcctcatt agcttcagac ccagcagggc tgggctcaca 480
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gagatgggg 549

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<210> 26
<211> 350
<212> DNA
<213> Homo sapiens

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<400> 26
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 gatggcttac gtgcagggta atgtatgaac cttcccaagc tctgtacaaa tataacttgt 180
 cattcgtaga gacgtatgta tttatatgtg tgcattgcagt cttatttgtg gattttcttc 240
 ccatttgctt aataactgaac gctatggcct agatgtgaaa tttaccaggt actactcata 300
 gcaggcagtg aaaccgtgga ctcagctgct ctttccttct ttctctccca 350

<210> 27
 <211> 627
 <212> DNA
 <213> Homo sapiens

<400> 27
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 aaaaggataa gaaagaggat acagagttta atcagagttg gcatcagata gagtaaccat 120
 ggacatttgg aagctgtaac ctctctcata tttcgccaag gataactgct tcctgtatta 180
 tcatgtaatg agttttatgc gtgatggaaa atgtaaaagt aatcttaacc caaacctgca 240
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<210> 28
 <211> 548
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (132)..(348)
 <223> a, c, g or t

<400> 28
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 tcttgctgga gtnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
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 atgttgatag aaaaatgggt tgatggcagc atatatccag attgtagatt tcataatatt 420
 aaaggggagtg gggcaaataa taaaatgcaa gaaatgaaag catttgaaaa tttagaggac 480

agaaatgact tttaagtaag tgatttttagg tgtactggaa tgagtaatct agaatatattg 540
 atatgaga 548

<210> 29
 <211> 988
 <212> DNA
 <213> Homo sapiens

<400> 29
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 ttcaaggaaa accaagcagc tcttgactca acaataaaaa atgtaagtct gtctgaagaa 180
 ttagtgaacc agggcaccca gtcagctttc tcctaaaaata aatttggaga gctgaaagat 240
 atggatgagg tcagatttct aaaaaatcag tatacacaca gtgttttaag aataaaaaaac 300
 agattgatta aagggaaaaa taattttgtaa ataacagaag ccataactta gagataaaaaa 360
 taactgtcct ctgattaaca gaacttttag aatgatgaga aaaattaata acacagttaa 420
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 tacaggctga aaaagatcaa agtaaaatga atcaggctcg tatcagaaat ttcagtgata 540
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 ggttcttgta cccaaccaa ttataactta tgtgttagga caatagagaa gtaatttttag 660
 ccaaagaaat aatctgaaat tatagcatct atgcacattt attgaaacaa gaaactcaga 720
 aatcaaaata gccgagaaat taataaaata ttcaaaagga ggaaaataca ttttagaata 780
 aagcataatg aggaataaaa tcactatgac tttttgaaag tataaaaatt gttatttttt 840
 tctatgaata cttgctcaa tttaaagtag tggatttaat gttgtagcgc taagtattca 900
 gccaaagggt agaactaata aataaaaatg atagttcttt taaaaaaaca taaaaataat 960
 tatctcatga gtagcctaag aaaaaagc 988

<210> 30
 <211> 651
 <212> DNA
 <213> Homo sapiens

<400> 30
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 aaaaagtcca acacatttgg ggctggacac accagtcaaa tgggtgaaat tagaagatgg 180
 ggaaaaaata tgtcaggtaa atactttatt tcattggatt tatgacttcc cctgtaagaa 240
 gcattattat tttatataaa tacccaaaaa aaaaaaaca caaaggcagc taaattctga 300
 aattaattgc atatgcatca tgatttcaga tatattaaac tgtgaaaaaa gtgcgttaaa 360
 atggtaaagc acaataatca aaataaagtt tgtatagcaa tattaatatc acataaaata 420
 taaattagaa caaaaaagca cttataggga taaagagaaa caccagagaa aaacaaagaa 480
 aaaatcctaa gaaaatataa ctttcacata cttatatggt ttaacagcaa agcccgtaga 540
 ctgtttaata taggaagcac aaacgtgact gaagttacaa gagactgaga caactttcaa 600
 aactcatggg gggagaattt tatcacttca acagaaactt aacaatttaa c 651

<210> 31
 <211> 553
 <212> DNA
 <213> Homo sapiens

<400> 31
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 aaggtttttat tagattctac atctcatgat tgatccaaaa gacgttttaa aaacaaaaca 180
 aaaaaaggcc ttgtaggctc taactcttac ttagcctcac atttatttga tagtttgagt 240
 gagtatctta aaaattgaag atgattataa aaattttaat gtagacatta ttttttctca 300
 gaattttgaa ggcactgctc tgtcttttgc agttggagag tctgatgcca ttctgattct 360
 taaatctttt atacaaaaca tgtttttgct tttggcagga agctttacct tttctttctt 420
 tcaagtgtcc tgaaacttca ctgagatgta tcatgggtata ggtccacttt gatccactgt 480
 cctggacact tgctaggcct tttcagtcct gaagctcatg actttcaggt aagagaaatt 540
 tacgtctaag acc 553

<210> 32
 <211> 2159
 <212> DNA
 <213> Homo sapiens

<400> 32
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 tttggagggt acagataatg ctactataaa catccatgtg caggtttttg tgtgaatgta 180
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 tccaccagca ataaatggag ttctgttgc tccacatgct cactagcatt tgggtgtgtc 360
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 caattcccta atgacatatg atgttgaaca tcttctcata tgcttatttg ccatctgtat 480
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 gcctgctggg ttcaagcaat tcttctgcct cagcctccca agtagctggg attacaggca 660
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 gccaggctgg tctcaaactc ctgacctcag gtgatccacc tgctcagcc tccgaaagtg 780
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 tctgagggaa tctgggatcc ccccaaaaag gatctcagtt tgatcaccct acagtgaagg 1440

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gtttgagcag agtcacatat taccagagaa ttcgaggata gtatctccga gaagccggga 1560
aaaaactcag ttaagagaga agggatgctt taaaaaaaaa aaaagaggtc ttagacgtaa 1620
atttctctta cctgaaagtc atgagcttcg agactgaaaa ggcctagcaa gtgtccagga 1680
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gttttgtttt taaaacgtct tttggatcaa tcatgagatg tagaatctaa taaaaccttt 2040
ttatgattta tctcccataa accatttttt caggaaagta gataatatgc tccacaaaat 2100
aaagtacatc aaggaaaaaa ggcattcttag tctttgatgg aagaaaggagg aagtccagt 2159
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<210> 33

<211> 450

<212> DNA

<213> Homo sapiens

<400> 33

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agaaaacaag atccagatac aaaaatcgat tgtatttttaa ctatgctaata aattagcaga 60
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taaatctgac aaaaaatgtg agctacctgt acactggacc actaaacact agtgaaacaa 180
aattgaagag ctacttaatt ggaaatcagt ttccccccag atttatctat agagtcagtg 240
aaatcccaat caaaatctca gcaaggtctt taagaaattg acaatcttat tttaaaattt 300
aagtggagat gcgaaataac taaagcaatt ctctgacaaa aacaagaaaa aagctagaag 360
gctaacaacc acactgattg caagattttat cagaacagggt ataataatca ggccagtgtc 420
atatcggcat acacgataga ccaggagatc 450
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<210> 34

<211> 584

<212> DNA

<213> Homo sapiens

<400> 34

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ctagacttat ggatttgagg gagctgtgtg aaactcatca tggcaaatat gcttatgtgt 60
atatatcctt tgccatacat gtgctgcaaa ctgtaatgaa atgttattta taagactggg 120
aaggcatgtg ttattagact ggacacacaa aagcccttga ttatctagga agcaatcctc 180
taggggccag atgtagtttg gaatgtgggt gtttagtata actgtacttc attactgatt 240
tttatttcta tgctgtttga ctgtattagc tctttgttat tattggggag gtagccagag 300
gtctccagat tcccataatg aattttacagg tgtgatctta tggacaagga ggagtcagct 360
gtattagttg ggggttcaat cttgacctgat aagcttttcc tagttgggtt tacagatacg 420
agccctgata tactccctgc tgccactgtc tgtttctatg atgcatgtca ccatgatata 480
tgagtatgta tgaaaatata tttaggctaa ttttaactag aatatggaaa ggaaaaagtt 540
ctattgctct gcattgctct gttttcagca atcactgttt ttca 584
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<210> 35
 <211> 642
 <212> DNA
 <213> Homo sapiens

<400> 35
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 tatatatcct ttgccatata tgtgctgcaa actgtaatga aatgttatTTT ataagactgg 120
 taaggcatgt gttatttagac tggacacaca aaagcccttg attatctagg aagcaatcct 180
 ctagggtcca gatgtagttt ggaatgtggg tgttttagtat cactgtactt cattactgat 240
 ttttatttct atgctgtttg actgtattag ctctttgtta ttattgggga ggtagccaga 300
 ggtctccaga ttcccataat gaatttacag gtgtgatctt atggacaagg aggagtcagc 360
 tgtattagtt ggggggttcaa tcttgccctga taagcttttc ctagttaggtt ttacagatac 420
 gagccctgat ctactccctg ctgccactgt ctgtttctat gatgcatgtc accatgatat 480
 ctgagtatgt atgaaaatat atttaggcta attttaacta gaatatggaa aggaaaaagt 540
 tctattgctc tgcatttgct ctgtttttca gcaatcactg tttttcacc acatatagaa 600
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<210> 36
 <211> 669
 <212> DNA
 <213> Homo sapiens

<400> 36
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 ttgaaggctc ctgaccacat tattegcaat tctaactctc ttgccacccc ttccccatga 120
 cccatgtaca attacatgct ctagatcttc tcctcaaaga tgaacataag tctgaaatat 180
 caacaccttg gcagccctat tatcaattgc tgatctgtag tccccatgta agtacgcctt 240
 ttttagcaac cagtttttTgt cccagccata ttaatacttg tggtcagtgg ttaacaatgt 300
 tgaagcttaa attatatcca gatgaaattt taaaaaggaa tcaacttgtgt tcctctgtgt 360
 taacacagga atcccagcat gtgtttctct tccaggaaac cataattata tgtacaaata 420
 tctaccogga caattagggg cataatcatg ctctaaatag aagtgttcaa acaagtcaac 480
 acctctctc cagttattcc tctttcttct ttctcttaga tgtcatgggt tctgtgtctc 540
 aagacattta tgatttgatt tttctaacc tttctagggt ctattagagt caattagaca 600
 acatattcct tctttctaag aatctggaca aggaggtata cttttctaaa ttttaatcct 660
 attaatgcc 669

<210> 37
 <211> 1006
 <212> DNA
 <213> Homo sapiens

<400> 37
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 caaataggctc cagaaggtaa aatgaggacc caaggataga agagcgacag tgatttcagc 120
 tgagcctcag ttccaagcac agaacttttc agaaacagaa tgggttgcat aatatgtccc 180

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cttttaaaag acactttgca gacctggatg cctgtgtgtt ggcattggagc atagagggtt 240
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caggagtcta gaattctaag tttctttctca ggagactcca aaattttacta gaatgtcctg 360
aaccacatct ttcataatgt tgctgactca aagactcttg aaggctcctg accacattat 420
tcgcaattct aactctcttg ccaccccttc cccatgaccc atgtacaatt acatgctcta 480
gatcttctcc tcaaagatga acataagtct gaaatatcaa caccttggca gccctattat 540
caattgctga tctgtagtcc ccatgtaagt acgccttttt tagcaaccag tttttgtccc 600
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gaaattttta aaaggaatca cttgtgttcc tctgtgttaa cacaggaatc ccagcatgtg 720
tttctcttcc aggaaacat aattatatgt acaaatatct acccggacaa ttaggggcat 780
aatcatgctc taaatagaag tgttcaaaca agtcaacacc ttctctccag ttattcctct 840
ttcttctttc tcttagatgt catgggttct gtgtctcaag acatttatga tttgattttt 900
ctaacccttt ctagggttcta ttagagtcaa ttagacaaca tattccttct ttctaagaat 960
ctggacaagg aggtatactt ttctaaattt taatcctatt aatgcc 1006

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<210> 38
<211> 589
<212> DNA
<213> Homo sapiens

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<400> 38
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ttcatatccc catctataaa atgaaaacac aatacttctc accaactt atacagcacc 120
tactatgtgc taggttagag atcataaact ggtgatatgt aagtggata taaccctcag 180
acttggctctg tgtgttctac gcagttgatc tgcaccagcc tttgttaaaa ttggaaggaa 240
attgctaata tttaaaatca ggatatttcc cagcaaaatc tacatttcta gtatctcaga 300
aaaatcatta tttggcagca ctggggccaga atttctgcag ggcaattgtt gtcctgactt 360
gggtggctgg tggaaatggg cgtgtactcc taagtttgtc ccaattgcta ccgctctatt 420
acttcacct ttaatgttca ctactcttgg ccctgtggga tttttgaggc tgagattcct 480
atattaggtt ctgaaggcaa aacacacaca gaaaagaatg atttcaggcc cttcctgagc 540
atactcatga tgtataactt ttatgacagt aatagtagta tctagcaat 589

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<210> 39
<211> 528
<212> DNA
<213> Homo sapiens

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<400> 39
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aaaggccaaa ctgattaata agggataaat aaagtcatgc aaatgaaaag gttgtatatg 180
tgttggggga aagcattcca gacagaagga ccagtgtgtg caaaggccct ggggtgagag 240
gtgcctaata agtactgaat atacaaagag gtagagctgg gactaaacca ctgtgctcac 300
tttgcttctg tgaattccga ttccaaggag tggaaatagac ttcaaagtgc ttcaagtcca 360
cttggttctg ccaagtcttc atttttgttc catgaaggca gagcaccttc tttatttcat 420
ccactgatga cttctcagcc tctagaattc tgccttatga tggatttctc agaaatatgt 480

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ttgtgtaatg aagacaagga cagtggtag agtttacatt ctactggg

528

<210> 40

<211> 673

<212> DNA

<213> Homo sapiens

<400> 40

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ctgaggtggg aggattgctt gagtcccgga gttggatgct gcagtgagct atgattgtgc 120
cactgcagcc tgggtgacag aacaagaccc tgtctttaa aacaagaagt aagaataaaa 180
gagattgtgg tggagtatca caggcagcgt gggagcactg agggagcccc tgaccacccc 240
taggagtgga tcaggatgac ttctgaaagg ccaaactgat taataaggga taaataaagt 300
catgcaaagt aaaagggtgt atatgtgttg ggggaaagca ttccagacag aaggaccagt 360
gtgtgcaaag gccctggggt gagaggtgcc taatcagtac tgaatataca aagaggtaga 420
gctgggacta aaccactgtg ctcactttgc ctgcttgaat tccgattcca aggagtggaa 480
tagacttcaa atgtcttcaa gtccacttgt ttctgccaag ttctcatttt tgttccatga 540
aggcagagca ccttctttat ttcattccact gatgacttct cagcctctag aattctgcct 600
tatgatggat ttctcagaaa tatgtttgtg taatgaagac aaggacagtg gtttagagttt 660
acattctact ggg                                     673
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<210> 41

<211> 447

<212> DNA

<213> Homo sapiens

<400> 41

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cttgtccctt cactgccttg cctaggggtg cttctctctc ctctcttaag ctgagtacaa 120
gtgataatat agtgattaac acaatgctgt agtgttttcc tgttaaacag ggaatggttg 180
atthttccagg agaataaaaa atgaaattgt cattggagga cctcctcagt tgaaatcatt 240
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agctaccag gtatacaaat agcttctttg cagttctgat catctttagg ggccgcattg 360
ggcataattg gaataataat actagctaac ctgcttgagc ggcttgctct gtgctgtgca 420
ctttgtgagc acttttaaata taggagc                                     447
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<210> 42

<211> 562

<212> DNA

<213> Homo sapiens

<400> 42

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cttgtccctt cactgccttg cctaggggtg cttctctctc ctctcttaag ctgagtacaa 120
gtgataatat agtgattaac acaatgctgt agtgttttcc tgttaaacag ggaatggttg 180
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atgttccagg agaataaaa atgaaattgt cattggagga cctcctcagt tgaaatcatt 240
ctgtggctga tttcctccta ttttgttttt tgttggttgg ttggtttttg ctttttcagt 300
agctacccag gtatacaaat agcttctttg cagttctgat catctttagg ggccgcattg 360
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ctttgtgagc acttttaaata taggagccaa acctctcttt ccaaaaagcct gaagggcagg 480
tgtcctcgca gttcccatc catagatcac catccttcca tggaaagtac tctgtggact 540
gtaacttgcc atctagactt tt
562

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<210> 43

<211> 848

<212> DNA

<213> Homo sapiens

<400> 43

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acaagatacg ttattagggc aagtatttac atggaaaggc tctgagttct ccaagacttt 180
ggtcattttt tacaagatga tgtactacc tcatgatttg tggaatcttc ttaggaaccg 240
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ctccaaatac aacagcattg ctattctgct gccttcgtac atgccgttta cattactgtc 600
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tgcccaccca gcaagcctct aagctcctca aagacaccaa ctgtcacgca tatctggagc 780
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848

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<210> 44

<211> 1111

<212> DNA

<213> Homo sapiens

<400> 44

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ggtcattttt tacaagatga tgtactacc tcatgatttg tggaatcttc ttaggaaccg 240
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ctccaaatac aacagcattg ctattctgct gccttcgtac atgccgttta cattactgtc 600

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acattgtcca ggaattcatc cctgccatga ctgcagtgcc ccctctggga gctccccgtg 660
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<210> 45
<211> 626
<212> DNA
<213> Homo sapiens

<400> 45
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gataattcaa ttagtgaatc aaacaatgat aaaagctata tatttcctgc tgatttgtca 180
ggaaaatagt acactgacaa agatagcatt acctaagaat ataaaagcaa agatagcggt 240
gccacagact gcttaatgtg tgtcatctat caaaggggta tatgtgatga gaagaaaaac 300
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<210> 46
<211> 185
<212> DNA
<213> Homo sapiens

<400> 46
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atctctatta ctgtatccat ctctatatac ttgaactcca tatgctctat attaacttcg 120
ccaaatccaa cccaacaaac agggttcatc tctgattttt cccccatat ttatgattct 180
cagac 185

<210> 47
<211> 268
<212> DNA
<213> Homo sapiens

<400> 47

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caccaccccc ctgccccagg aagatgtgat cttgtgcac ttgtgttcac gcagagtagg 180
gtagttggat ctttgtcaag tctcagtgat ccacatgcgt gcacatctattt tgtcagtcctg 240
cttgtctttg tatccatgtc atactgtc 268

<210> 48
<211> 108
<212> DNA
<213> Homo sapiens

<400> 48
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atgcctgccc tgcgcgaggc cttcccgagc gcgcgcgtgg cgctggcc 108

<210> 49
<211> 83
<212> DNA
<213> Homo sapiens

<400> 49
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gccgctcgac gaggcgcagg tgc 83

<210> 50
<211> 475
<212> DNA
<213> Homo sapiens

<400> 50
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taacactatg agtttttcta taaacaaaat atagcaagat taagttgata acatacattt 180
ctaaaatttt ggcttcctta gagaaagcca accaaatata aaattttaca gcagagtcaa 240
gttttttcag tttggcctat attttctttg gtaacactgt tctgaatgta tatgcagtgt 300
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<210> 51
<211> 607
<212> DNA
<213> Homo sapiens

<400> 51

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gtctgtttca agcaaatcaa gtaaaacttc tccatcacat caaaagtaag gcttttatatg 480
gttcacaagt agctatatga aataaacaga atttaaacga tcttaataat ttttttcttt 540
aaacaaggtg acaaaataac aatgccata tataaaaact cctcattaat gataagtgtc 600
agatgga
607

```

<210> 52

<211> 590

<212> DNA

<213> Homo sapiens

<400> 52

```

ctcctcatta atgataattg ctagatggac accatgtaaa gtatggaaaa tgcctgtctg 60
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gatgttttga tcagagtttt tagaaaattt ctaggatctg ttgccttttg acttttagagc 180
ttcttgagag cacatgtcag tactaaaacg ttttcttaag ccctcgcttt ccatagcaaa 240
aacatgttat gtccattatc cacctaactc atacttaaaa acaacacca agatgtctcta 300
ttttgttttc aaagtcagag aagaaaatag aggggaagta tttttatgtt cttttccctg 360
aattgggtcga agctagttag ttcaaaaaag atacaaaata tggaatacca cctattttat 420
ttcctggcaa ctgtttcatt caaatcatag agtaacatat gatttactac actcctttat 480
gaatattaat ctctgtatctt cacagaatga cttaatatca ttgatcagct agaacatcga 540
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590

```

<210> 53

<211> 217

<212> DNA

<213> Homo sapiens

<400> 53

```

agtctgctaa ctcatccag tggttttttc caactgcac tcagttatct tacatagact 60
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ccctcaacca catccctgat gaactttttgc cagtgccggg aattaacaat atcacaaggc 180
tgttctgatt gtctgtatct ctcagtgttt gtttagag
217

```

<210> 54

<211> 430

<212> DNA

<213> Homo sapiens

<400> 54

```

aataaagata agaatgacaa cagatttctt tttgggaaca atgagagtgg gaagacaatg 60
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aacatcatca ggcagaagga aaaaaatagt atcagattga agtctgttct acacaaagta 180
atgaatacca gaaatgataa ctacctgggt aaatatataa gattattttc ttcttattta 240
aagtaagagt gagattctta tcaacaatag cataaaggct gaaggggaga aatggaagtc 300
tattagtgtg atcttataca tgatgtggta tgatgtcact tgaatgtaga attataaaga 360
taaacagcat aaactcttaa agcaaccacc aaaataacaa agagttataa ctaataattc 420
agcaaaggag                                     430

```

<210> 55

<211> 2956

<212> DNA

<213> Homo sapiens

<400> 55

```

gttgtgtgtt ttttttttga gacagagtct tgctctgtcg tctaggctag agtgcagtgg 60
cgccacctcg gctcactgca acctccacct cctgggttca agtgattttc ctgcctcagc 120
ctcccgagta gctgggttta cagggtgctcg ccaccacgcc cggctaattt ttgtttcttt 180
agtagggttt caccgtgttg gccaggctgg tctcgaactg ctgacctcgt gatctgcca 240
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tctgatactt ttaagggtgc tttctgaaga taaaacctga tgtgtctgca atgctagagt 480
gaggcttgag tatgggcaag cttcctgagt gcacgtgtga gctgaggaca gcatggcgtg 540
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gcacgtgtct actgggtgtt ttgacaacgt ggagtgaata cttcatgtcc tcacaaattc 660
aaatgctgtt tttatcatgt ataaatatta tattggaaaa aaataaaatc ataataaggt 720
tatttgtcct cttatcttga agaaaaacac atacatgttg cacttctgaa ttaccttaa 780
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agaataaaga caccaacctc ttttgtcatg aggctcaaag tctcctctgg ataccgttct 1680
ataatctgaa gtaatctagg aaacttcaat ctggcttcat tggaatttaa ttttaaagct 1740
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```

```

atcaaggaca ccaaagaaga aagcaatggt caatgtatcc caatatccat aaactatgat 1860
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aactaccact ttacaccaac aaacaccagg tacagttttg tatctatcct ggagccaaat 1980
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ctttaaagat gttgctcatt gtcttcccac tctcattgtt cccaaaaaga aatctgttgt 2940
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```

<210> 56
 <211> 517
 <212> DNA
 <213> Homo sapiens

```

<400> 56
cctggctgga gcggacacgg tcaagaccgt cctccctacc ttctcccttc aaccaagct 60
caactcaacc aaaaatggcc cctctgtccc catgcctgat aggaaagtca ggggaaagtc 120
tgtccgatta ctgtcaaaga agacaggagg taagggtcag agtggaccac tgactgaata 180
tgagtcgcag aagtgttaga ggcagaagtc cagggccatt tccttaatat cgaagtgtct 240
ctgctggagg tctgggatgg atttttgccc tgcatttaga agttctgggg tcctgggaga 300
ggggagagaa gcccaatagc agaggagaca gagtgtgggc ggggcgagcc ggaggggtgc 360
atcctgggag agcaccaggg tgaggagggg gtgaagatga gcccgcagc ggaagcgctg 420
gcgagtgtgg gaagtcacct gccctcggc ctgtgagctg ctctgcttgg agtgactaag 480
gctcgggagg tccaggctcg gccagaggca gctcata 517

```

<210> 57
 <211> 1490
 <212> DNA
 <213> Homo sapiens

```

<400> 57
ggggaaccag acgccagtc acaggcgaga gccctgggat gcaccggcca gagggcatgc 60
tgctgctgct cacgcttgcc ctctggggg gcccacctg ggcaggaggt aagtcagtgg 120
ggctctgcct caatctcccc tgcctccctc caggagagcc aggactcac ccggcccttg 180

```

```

tcccagacta actctggtca cagaaccatc ctgtctgcct ggaggggagg ggtcccctgt 240
tctggcagag gtcaccccca tatcacgca tggggatttt cttccccttg ggtctctctt 300
ttcttcagag atgtatggcc ctggaggagg caagtatttc agcaccactg aagactacga 360
ccatgaaatc acaggggtgc ggggtgtctgt aggtcttctc ctggtgaaaa ggtgagtagg 420
gctatggtca tgggcccagc gccatgtccc ctcccatccc acagtttcag gaactcaggg 480
cagcgggtaa gcacccgtgg ccacttttgc cacacatgcc tggctactgt cgatgcttcc 540
tggctcccg c gatgcttcc tggctggagc ggacacgggc agaccgtcct ccctaccttc 600
tcccttcaac ccaagctcaa ctcaaccaa aatggccct ctgtcccat gcctgatagg 660
aaagtcaggg gaaagtctgt ccgattactg tcaaagaaga caggaggtaa gggtcagagt 720
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gcgagccgga ggggtgcatc ctgggagagc accagggtga gggaggggtg aagatgagcc 960
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gggttggtga ccagtga gctgtgagag acccaaagtc tgatggtgct ggactctctg 1320
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tggacgtcca aagctttgcc tctctcccag tgtccagggt aaacttggag actcctggga 1440
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```

```

<210> 58
<211> 436
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (197)
<223> a, c, g or t

```

```

<220>
<221> unsure
<222> (432)
<223> a, c, g or t

```

```

<400> 58
ctctgtctcc tcataggaat ttcttagttt cttggctttc gaatgtgact caaccctcc 60
cttggcctgt ctgtctgctg tgctgctttt aggttctgct gccacggcta actatgtttc 120
cctgtgtttc cagataaact tgtgaggggc agaagctgac agaccaagct cttttttcaa 180
gccaatctgt gtcatanaga gaccacgggt tttccttggg ttgggtcctt ctacctggtt 240
cagtcagctg tgaacaaaac ttgtggaatt tggatctttt ccttaaaatg gagatacagag 300
agatcaccat ggctggcgtg aaactagttc tggatctgat tgtcttttca attgtttgtc 360
catcaggtga accactctg aagggaactt tggtaacatt ttccccaaaa taaagatcat 420
taattaatta tnaaaa 436

```

<210> 59
<211> 458
<212> DNA
<213> Homo sapiens

<400> 59
ctctgtctcc tcataggaat ttcttagttt ottggctttc gaatgtgact caacccctcc 60
cttggcctgt ctgtctgctg tgtcgctttt aggttctgct gccacggcta actatgtttc 120
cctgtgtttc cagataaact tgtgaggggc agaagctgac agaccaagct catttttcaa 180
gccaatctgt gtcatacaga gaccacgggt ttcccttggg ttgggtcctt ctacctggtt 240
cagtcagctg tgaacaaaac ttgtggaatt tggtcatttt ccttaaaatg gagatacgag 300
agatcaccat ggctggcgtg aaactagtgc tggatctgat tgtcttttca attgtttgtc 360
catcagggtga acccactctg aagggaactt tggtaacatt ttccccaaaa taaagatcat 420
taattaatta taaaaaaaaa aaaaaaaaaat gagcggcc 458

<210> 60
<211> 359
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (336)
<223> a, c, g or t

<400> 60
cggacgcgtg ggaaacacaa actgcatcat caaaaaatac acctttgggc cacggatgcc 60
actggaagac atctgaattt tagacctcca gagagaagat ctgggtggct agctccagag 120
tggaggcatg cttgcttttt ctttacactt gtgaagagga atggatccgg acatctgcaa 180
tctgggtaga ggacggcagg cagcaagctt agccactcgg ccaggcttct cagcccttac 240
tctagacatg tgatccttcc tccacgtgat ataactcaca actttcttac ggctactcaa 300
ggcatcccaa gttaaaagga aggtcagatg tgattnatca ctttattatg ataaaaaaaa 359

<210> 61
<211> 932
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (161)..(180)
<223> a, c, g or t

<400> 61

```
tggccagaga catatgaaaa gatgccttag acatatagca tcttttctca tccacttact 60
aggagaaatg ctcactaaaa ttatcctgta atgccattta aaaaaatctc agattgttga 120
agtacaaaaa gttagataac atattatcaa ccaaaatgtg nnnnnnnnnn nnnnnnnnnn 180
ttggggccagc tgtgtttggg taaactagtt aagggtggtag ggttggttgg tcaggaatta 240
aatcataaag aaaaacaaaa cctctgaaat gaaaactcat ggtgagggta aaacttcacc 300
ccttgtagtc acttatgttt aactggtcta ctggattttt ttaaagggtta agaaaacaca 360
aactgcatca tccaaaaata cacctttggt ccacggatgc cactggaaga catctgaatt 420
ttagacctcc agagagaaga tctgggtggc tagctccaga gtggaggcat gcttgctttt 480
tctttacact tgtgaagagg aatggatccg gacatctgca atctgggtag aggacggcag 540
gcagcaagct tagccactcg gccaggcttc tcagccctta ctctagacat gtgatccttc 600
ctccacgtga tatacttcac aactttctta cggctactca aggcattcca agttaaagg 660
aaggctcagat gtgattctca ctttattatg ataaaaaaaa ttactattta aatactataa 720
ataaatatta taataaatac taagctagaa ccatacagaat acatcacttc tgtatccagt 780
tttcaaagta tctttggtgt ttgtcaggaa taaataaaag taatcatttt atttctatta 840
aattatatct ggcactagtg gctagtactt ttgtacttat tagtacaacc ttaaaaagtc 900
ttaaaaagat ttcttttggg ttcagaacat aa 932
```

```
<210> 62
<211> 554
<212> DNA
<213> Homo sapiens
```

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<400> 62
ctggcagatc cggacgggca ggactgggtg tgtcccatga gagcacctcc ttcctggcct 60
ttcctgtgga ctttgtccca caccactgc ctgggttcc tcttttagtc acttcagct 120
ccaggcacag cagttggtga ctccttggtg ggagccgtgt cccaccggt cctgatactg 180
ccgtcttctc tttcacagtc ctccaggctt gggccagcct tgggggcagc agagcttctg 240
gggtgagtgt cgagatcctg tgtcctgaga gcggtagtca gggagagggc tggtcggggc 300
agggctgccc gggcaggaca caggatgcgg ccggccaggc tggggccaag gtgttcagac 360
ctggactttg ggctcgtgct ttcttcattg ttgcgccttg ctgctgtcc cttggagtct 420
tcatttggtt ttgctttttt tgtttgtttg ttttcacctt atttttgcca gacttaagct 480
agttttgctg ccttttgaaa ctagtggaaag aatcatttta tttcctgggg ataatttggt 540
ggcttttgaa tcca 554
```

```
<210> 63
<211> 786
<212> DNA
<213> Homo sapiens
```

```
<400> 63
ccagtggcct gtgtcctagc aaatgagagc caccctgaaa aataaaatcc tgtctcccca 60
acgccagccc tggcaaggca ccagaaactc tccggaatgc ttgaaggcag ggctggcct 120
ttccatgggg tccagggtctg tggggctcct ggcggtactg tgggcctgca gagcggggca 180
tgtgggctga agaccgtctc ccaccatgg tgggaaggga caaagggtgg ccctggcaga 240
tccggacggg caggactggg tgtgtcccat gagagcacct ccttctgtgc ctttctgtg 300
gactttgtcc cacaccact gcctgggttc cttccttttag tcacttccag ctccaggcac 360
```

```

agcagttggt gactccttgg tgggagccgt gtcccacccg gtcctgatac tgccgtcttc 420
tctttcacag tcctccaggc ttggggccagc cttgggggca gcagagcttc tggggtgagt 480
gtcgagatcc tgtgtcctga gagcggtagt cagggagagg gctggtcggg gcagggctgc 540
ccgggcagga cacaggatgc ggccggccag gctggggcca aggtgttcag acctggactt 600
tgggctcgtg ctttcttcat ggttgccgct tgctcgctgt cccttgaggc cttcatttgg 660
ttttgctttt tttgtttgtt tgttttcacc taatttttgc cagacttaag ctagttttgc 720
tgcccttttga aactagtgga agaatacattt tatttcctgg ggataatttg ggggcttttg 780
aatcca 786

```

```

<210> 64
<211> 575
<212> DNA
<213> Homo sapiens

```

```

<220>
<221> unsure
<222> (411)
<223> a, c, g or t

```

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<400> 64
ggcacagcta gttggtgact ccttggtggg agccgtgtcc cacccggtcc tgatactgcc 60
gtcttctctt tcacagtcct ccaggcttgg gccagccttg ggggcagcag agctttctgg 120
gctgacatgg ggctcattgc tcctttctcc aagccctctg agggacatca aaagcgtggg 180
acgcatccac ttttccacca tcttggtctg cccactgtt ccctccatcc tggagggcct 240
tccttaagca catgtgtggg ggtgggcagg cactactggc gatagctgtg gatgcggccg 300
tgacatcctt caccctgcc cccatggcat gcatgatcca ttagggagga ccgtctgcac 360
aaaggctctt tgccctgtgc aagcttctct caagactgga cttgcaaaag ntccagcctg 420
tatggctgga gttcccatg cctgccaatc tcctgtcgac tgcgagtcag ctccgatact 480
tcaccagatt cagccacctg ggggagctgg aagtgaatct cctcgtagct gagccttctg 540
atgagactgc agccccggct gacacctgga ttgca 575

```

```

<210> 65
<211> 834
<212> DNA
<213> Homo sapiens

```

```

<400> 65
cagcagttgg tgactccttg gtgggagccg tgtcccaccc ggtcctgata ctgccgtctt 60
ctctttcaca gtctccagg cttggggccag ccttgggggc agcagagctt ctgggctgac 120
atgggctcat tgctccttct ccaagccctc tgaggacatc aaaagcgtgg acgcatcact 180
ttccaccatc ttgctgcccc ctgtccctcc atcctgaggc ctcttaagca catgtgtggg 240
gtggcaggca cactgctgat agctgtggat gcggccgtga catccttcac ccctgcccc 300
atggcatgca tgatccatta gggaggaccg tctgcacaaa ggtctcttgc cctgtgcagc 360
ttcctgcaga ctggacttgc aaagtccagc ctgtatggct ggagttccca tgccctgcaa 420
tctcctgtcg actgcgagtc agctccgata cttcaccaga ttcagccacc tgggggagct 480
ggaagtgaat ctctcgtag ctgagccttc tgatgagact gcagccccgg ctgacacctg 540

```

gattgcagca ctcattgaaag accctgagca gcaggaccag tttggcagag cccgaattcc 600
 tgaccacacag gaactgggag ataaaactct gtgggtttta tcttctcatt ttagagtgtc 660
 cagtgtccat gtgggtgtgaa cacgcttcat tcaacctggg cccttgggag agatgctgag 720
 tgggtcccg gctgtcccca ctccacacca tggcagtga gagctgctga agtacatgct 780
 tcatagtccc ttgcgtctcc tctatgagta cagttcctgt ttgtggagta gcaa 834

<210> 66

<211> 437

<212> DNA

<213> Homo sapiens

<400> 66

cgagaaagaa aaggtatagc tttaaagtggc ttttgagcag gcatgagttt atggaaccaa 60
 ggattcctgt gaagacattt tcttttgata aaagaatatt gataagaata ttataccaaa 120
 ttgaacaaaa gtagccacag tatgaaggat tcagtacatg gccaaataac ttatttcaaa 180
 atagttttaga gttatatattc ttgaagacgg aggttggtatg gggattaaat tttgtaaaga 240
 cgccaatggc tgttaaacia aagagctgag atggatgtgc tcttgaatta aaaataaaaa 300
 tatttttaaat atactattac atcataaaca ttctatgtct ctacttttcc atctagaagc 360
 aagaattctt tagtactttc cgagcatcta ctgtgtagac tatcttgtgt tatgaccaat 420
 tgcttatatt tatttac 437

<210> 67

<211> 80

<212> DNA

<213> Homo sapiens

<400> 67

acaaaaccat atgcttcaac acctcaggtt gaccatttgg ggggagtgtg tatgggtgtt 60
 ttaagatggc ggggtatgcc 80

<210> 68

<211> 663

<212> DNA

<213> Homo sapiens

<400> 68

gtgtagagca tggaagcagg gagaccagtt aggagtctat tgtaatagtc ctggtgagag 60
 accacagcgg cttggactaa gatggcaact aagataatga tggttgcagg gccctcttc 120
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<213> Homo sapiens

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 tagatataga tagatacatt agatatagat agatacatta gatatagata gatacattag 180
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 tgctctgtca ccgaagctgg agggtagtgg cttgttcttg gctcactgca acctccacct 360
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<210> 76
 <211> 334
 <212> DNA
 <213> Homo sapiens

<400> 76
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<210> 77
<211> 547
<212> DNA
<213> Homo sapiens

<400> 77
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<210> 78
<211> 263
<212> DNA
<213> Homo sapiens

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<210> 79
<211> 765
<212> DNA
<213> Homo sapiens

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ctgagccggc gteccgctcc ctgcctttct gcttcccagg tggagagctg gaacgagcag 180
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<210> 80

<211> 162

<212> DNA

<213> Homo sapiens

<400> 80

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gaacgggatt ttctgcctgt gcaaacatct tgacttgccc ca 162

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<210> 81

<211> 986

<212> DNA

<213> Homo sapiens

<400> 81

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<210> 82
 <211> 369
 <212> DNA
 <213> Homo sapiens

<400> 82
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 tttcttccct ctgatctggg tatcgatttc ctttttcttc ccctgttgca ctttccattt 180
 cattattggc agctgtccct tctctggggg tcctaataca acacatattc tttagcacat 240
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 gtaggttctg gtcttttttc agcttaggaa catctatttg ttgcttgatt tgattattgt 360
 tagtttggt 369

<210> 83
 <211> 923
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (354)..(565)
 <223> a, c, g or t

<400> 83
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<210> 84
 <211> 338
 <212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (12)

<223> a, c, g or t

<400> 84

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ataataggcc aaataaaatg cgattctttt tttctttg 338
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<210> 85

<211> 436

<212> DNA

<213> Homo sapiens

<400> 85

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gctccatgct gtcttgggga caagggcctg tactgccttc aaatctgggc tcacccaca 180
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ttctatgcat gatatactgt gtgggtttat caagagtgtg gacacagttg ctgttctcaa 300
ataataggcc aaataaaatg cgattctttt tttctttgaa acacacagaa cagcccagct 360
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gtcaaagact ctccag 436
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<210> 86

<211> 462

<212> DNA

<213> Homo sapiens

<400> 86

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accatctcca aattataaaa cataagactt ttttttagta aaaatatatt tttttacaag 180
cacagtggct tgcaccatgg aggggagagg aggtgttttg tccttgagc tgctggcctg 240
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gtggtggtgg aggcctgtga gtgggcactg gtaatgggaa cagctgtaaa accctggagg 360
ccagccccag gagagtgacc ttaccagga aagttctggg aaacaaacca cagggaggct 420
ttacaggaat ttttggttgt gccacaggc aaggcacatg ag 462
```

HITACHI

HITACHI

HITACHI

HITACHI

Introduction

HITACHI

```

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<210> 89

<211> 1263

<212> DNA

<213> Homo sapiens

<400> 89

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aaa 1263

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<210> 90

<211> 554

<212> DNA

<213> Homo sapiens

<400> 90

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<210> 91
<211> 435
<212> DNA
<213> Homo sapiens

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<223> a, c, g or t

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<220>
<221> unsure
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<223> a, c, g or t

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<221> unsure
<222> (421)
<223> a, c, g or t

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gaacagatat ttccaaatgg cggcaataga ttatggaaaa tggagnaagg nnagagagta 420
ntttactttc agcta 435

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<211> 580
<212> DNA
<213> Homo sapiens

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<220>
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<222> (551)
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<223> a, c, g or t

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<222> (566)
<223> a, c, g or t

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<210> 93
<211> 724
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (297)..(602)
<223> a, c, g or t

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<210> 94
<211> 586
<212> DNA
<213> Homo sapiens

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<211> 491
<212> DNA
<213> Homo sapiens

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<221> unsure
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<223> a, c, g or t

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gattataatg g 491

<210> 96
<211> 634
<212> DNA
<213> Homo sapiens

<400> 96
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<211> 397
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (326)
<223> a, c, g or t

<220>
<221> unsure
<222> (331)
<223> a, c, g or t

<220>
<221> unsure
<222> (337)
<223> a, c, g or t

<220>
<221> unsure
<222> (371)
<223> a, c, g or t

<400> 97
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tccttataca attagaattg catttatatt agggagtttg atattatccc acagatcctg 180
gatgatatat ttcatTTTTt tccttttctt tttcctagtg tttcagtttg gacgagtttt 240
atcgacatat ctttaaggctc actaatgatt ttctcagctg tgtcaagtct cctgataagg 300
ccaataaaga gactatatct attatngtgt ntttaanttc tagcatttcc attttattct 360
tagagtttaa nctctctaata gaaattaccc atcttat 397

<210> 98
 <211> 342
 <212> DNA
 <213> Homo sapiens

<400> 98
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 aagaggagaa tgcggaggag gctgcttgcc tgctgtggga tggatggcag gggcacttcc 120
 ccagactcac ttttctcaga tgtaaaactg accagccttg tgccacagat gtgaagatag 180
 ccccatagaa cttaaagagc agaccataac ttcccatgaa tgagagctac taacatttac 240
 atctgaaaaa caatttggat acttacccaa gtctccaaca aacaaagtca cactgaagct 300
 ggagagcaca ctcataacac ccggaaaaac attttttttt aa 342

<210> 99
 <211> 873
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (338)..(528)
 <223> a, c, g or t

<400> 99
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 ccagactcac ttttctcaga tgtaaaactg accagccttg tgccacagat gtgaagatag 180
 ccccatagaa cttaaagagc agaccataac ttcccatgaa tgagagctac taacatttac 240
 atctgaaaaa caatttggat acttacccaa gtctccaaca aacaaagtca cactgaagct 300
 ggagagcaca ctcataacac ccggaaaaac atttttttnnn nnnnnnnnnnn 360
 nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 420
 nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn 480
 nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnnnnn nnnnnnnntg 540
 aaatcacctg gtgaccattg gacaggcccc agagacaaat cttcttacct gggcaattca 600
 gaaggaggcc aagaccacct ggtgaccatc aaacaggcca tctggaggca aaactcctta 660
 tctggggaat ttagaagtaa tcaaacttcc ctagtatctg aagacggcat ctgatcatga 720
 tacaggaact agaaagaaat catttaggca gttagtgagg gtgaggggaag agagaggccc 780
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 tgtttcatat tgttttatac tcagtacctg att 873

<210> 100
 <211> 297
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (48)
 <223> a, c, g or t

<400> 100
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 cacacattca tatatggttt cagtcacaaa atggggtcac tctctcccct gacctatcat 180
 ttagggcatt ggaacatggc tgcattgtggc tctgtttgtg aggggtccagg ggatggacag 240
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<210> 101
 <211> 258
 <212> DNA
 <213> Homo sapiens

<400> 101
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 tccatgaaga agcacataat tcaaattatt gaagttttatc ccttctaata accacataga 120
 tttctcttgc cccattaaaa aattagataa tcagtatttc taggatagtt gttttcttcc 180
 aaccaattaa ggcataatct atgtagcaga acattcagag gatgatgcct ggtcaacatt 240
 tgaataaaca atcactgt 258

<210> 102
 <211> 712
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (603)
 <223> a, c, g or t

<400> 102
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 tccatgaaga agcacataat tcaaattatt gaagttttatc ccttctaata accacataga 120
 tttctcttgc cccattaaaa aattagataa tcagtatttc taggatagtt gttttcttcc 180
 aaccaattaa ggcataatct atgtagcaga acattcagag gatgatgcct ggtcaacatt 240
 tgaataaaca atcactgtga tgttacctct atttaagatg actccaataa aacttctatg 300
 gtttgcatta ttagttgatc agactttaag cattatcttt tgatagggtc aaggaacctg 360
 tottaactcc ccatctctga ccaaaatata cttgttttct ataagctata aagccagata 420
 gccaatttta tgagaattgt ccctatacta tatccatgtg agcgatgagt gcctggcatg 480
 aagatgcata aaggaggcag taatatacaa caactgaagc ataacctctg gagccagtct 540
 tcttcagaca aatcccaatt ccattactca ctggccacct aaacaagcta ctttaattcat 600

ctncctcagt tttcttcaac tgtttaatgg gtatgatcaa caaaccaact tcagtggggt 660
atcataaata ttaataaatg agagaatgca tgtgaaacaa agctataagc aa 712

<210> 103
<211> 173
<212> DNA
<213> Homo sapiens

<220>
<221> unsure
<222> (96)
<223> a, c, g or t

<220>
<221> unsure
<222> (140)
<223> a, c, g or t

<400> 103
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tggtgattag gcatgtgggtg tggcagtgtg gctggngggg acgagcatgg ctgggtgggta 120
agaacgtggc tgggagtagn agcatggccg gtggttggga atgtggctag tga 173

<210> 104
<211> 688
<212> DNA
<213> Homo sapiens

<400> 104
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cggtgtcttc tttccttcac caccaccag gagctcagag atctaagctg ctttccatct 180
tttctcccag cccaggaca ctgactctgt acaggatggg gccgtcctct tgccctcttc 240
tcatcctaata ccccttctc cagctgatca acctggggag tactcagtgt tccttagact 300
ccgttatgga taagaagatc aaggatgttc tcaacagtct agagtacagt ccctctccta 360
taagcaagaa gctctcgtgt gctagtgtca aaagccaagg cagaccgtcc tcctgccctg 420
ctgggatggc tgtcactggc tgtgcttgtg gctatggctg tggttcgtgg gatgttcagc 480
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acctgacctg acagggagga ggctgagaac tcagttttgt gaccatgaca gtaatgaaac 600
caggggtcca accaagaaat ctaactcaa cgtcccactt catttggtcc attcctgatt 660
cttgggtaat aaagacaaac tttgtaaa 688

<210> 105
<211> 977
<212> DNA

<213> Homo sapiens

<400> 105

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ggcttggaga gggtcacaga ggctagtagc tgtgtggact tgcaggcagc cccaaatgct 60
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gtggccagcg ctctcgttca tcattcagtc tgatggcttg agtgcctcta tgtttgctac 180
atgctgagac cgtattctag tgccgtattc tggaggctact ggggtgtacct acagatttaa 240
gaatgcaaat ctggaggtag acccagtgga ttcaaagtag tctcatagaa caaagagact 300
tatatagtga cctttgctgc atccactagt atacaccatc tgaggctctc tgaactgaaa 360
atgaatgtgg aagcaaggga acagtgtgat gttcagctct cagatctcac atggcatctg 420
atttggttg aggtgcctcc cctcctctct gtcccctggc tgtgggctca tggattggca 480
gagcccagtt atggcttccg ttttacttgc tataatatcc agaggcaatg tactagtcta 540
cctagaaaat tgtgctcacg gcatcccttt gtcacattaa taagcattat ggacactacg 600
acattttatt aagtattttg ttctgggtatc tacttgatta tagtaaatta tcaaaatcct 660
tatttagctc atggactctc attaaagcat gttctggaaa ccttggccat aggttaggag 720
cctgtaaagt ttgattcatt gcaagatata agtgattagc agttggtagt agtgacattg 780
atggggcccca ttaaaaggtc tattggatgt ggtgggtggca tagcgatagg ttggagttgg 840
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actctcttca tctccccacg ccttagccat gtctccctga ggttcatact gtttgaatt 960
tcacaggctc atttatc                                     977

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<210> 106

<211> 500

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (357)

<223> a, c, g or t

<220>

<221> unsure

<222> (367)

<223> a, c, g or t

<220>

<221> unsure

<222> (391)

<223> a, c, g or t

<220>

<221> unsure

<222> (410)

<223> a, c, g or t

<220>

<221> unsure
 <222> (430)
 <223> a, c, g or t

<400> 106
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 gacacctcct gtctgagact gcagctcaca ctgctgcatg cttcctggac accatctctc 180
 tgaccttggg cgcctctgcc tagcctgcag ctacgttctc tgacctccag ctcttctctc 240
 ttctccctc ggtaataacca aagtctcaag aacacagccc tcacttctag acagaaaggc 300
 ctcaccagga cccacctgtg tggcccagggt gtgacctcat gtacaaacac atctccnaaa 360
 atcacntct cgtcatcatg gaccctagta ntatccatga gttaacnctn atttctgtgt 420
 taatcggggn tgcagacat tttgggtgcag attcattgtg gctttgggggt gccatttggg 480
 actctcccc atgcacaatg 500

<210> 107
 <211> 476
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (466)
 <223> a, c, g or t

<400> 107
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 tagacactgg agccgatctt cttgagttcc aatagtggtt cttctacttt ttaaactctca 120
 ttttccttca tctttaaaatt gaagatagta acaatctcat ggggttgtga taactaaggg 180
 ggtaatgcat gtaaagtgtc tagaaaatgc ctggacatag gaagctctaa gtttgctgct 240
 actactgtta ttatggttac tattattaat cattgcaagg aaaatgtatc aacagatgaa 300
 tttggttcaa tactgccttc tagttttgtg accttagaat ttataggaac aaaaaagatt 360
 tgaagggagg ttgggctgga tcatagagag ccttgattcc atgttttagg atgtatacac 420
 agtgagaagt ccttcagggt ttggtcctgg gaagagttgt gaatcngaaa gttaac 476

<210> 108
 <211> 834
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (824)
 <223> a, c, g or t

<400> 108

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agtaccaata aaggtaaagc cactcaatta cgcagggctc tctctttatg ctttgggtag 180
gtgcacctgt gcaactgagg ggacggtcag tggtatcaag gttacctgtt attacaagta 240
gaagaaccca caaagatcag gagagagctc attttctctc attagtagga ggtaggacta 300
tacattcaca aacacgaacc ttaaaatagc tcacaaaata gtgtcataca tgtaccagc 360
catctttcca ctcatctcct ctcaaaagga atgtagtacc atatagtagt taagaatata 420
gacactggag ccgatcttct tgagttccaa tagtggtctt tctacttttt aaatctcatt 480
ttccttcata tttaaattga agatagtaac aatctcatgg ggttgtgata actaaggggg 540
taatgcatgt aaagtgccta gaaaatgcct ggacatagga agctctaagt ttgctgctac 600
tactgttatt atggttacta ttattaatca ttgcaaggaa aatgtatcaa cagatgaatt 660
tggttcaata ctgccttcta gttttgtgac cttagaattt ataggaacaa aaaagatttg 720
aagggagggt gggctggatc atagagagcc ttgattccat gttttaggat gtatacacag 780
tgagaagtcc ttcagggtttt ggtcctggga agagttgtga atcngaaagt taac 834

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<210> 109
<211> 498
<212> DNA
<213> Homo sapiens

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<400> 109
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aaaaaatact cttttccctt tcctcggaca cctaaatcta agagaacaac tcctatataa 120
aaatgatata aaaatcatat attttggag tatgtttcta actgttctga gaggctgcat 180
ggtaaagctg aagtgaaaga tgtattttta atctgtatat atgagcaagt atatattgat 240
gattgaagct aggtgctgcc taaatacatg gccagactt tgaggaatta tagtgtaatg 300
gctgggaata caggtttggg gtcacaccgt agagctgaaa gcttggcttt tatttagctg 360
tggttccttg ggcaggatag gtaatctgtc tgtgcctgaa ataccaccca caccatcct 420
gtaatggggg gataataagc ctgcctatct catggggcta ttaagaattt tcagttaact 480
tttacttatg aagtgcta 498

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<210> 110
<211> 259
<212> DNA
<213> Homo sapiens

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<400> 110
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ggagggggagc agggagggtt ttcttttttt ctttataaca ctggctaaat attttaatta 120
ctgctataga aggaagaagc taaaagtatt gcattcacia atattgcata gattatacaa 180
acacagaaat atatgcatat gcatgtttta aatatatgcc acatatcaac accatgtatc 240
caacttgaat aaggtcatt 259

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<210> 111
<211> 414

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<212> DNA
 <213> Homo sapiens

<400> 111
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 gacatatcac ttgcctcatt aacatcaagc atcccaaac ccagtctggg tcagttttgc 120
 ccagagtggg gttttagtaa cacgggttct cctgggatcc tatacctagc ccagaatcag 180
 ttgcaaaagc caggccatag caaattgtcc tgccagccag atagcagaga atctgacggc 240
 agcaggcaga aggagccgct ccattgcagt aagccaagat cgcgccactt gcctcattac 300
 atcaagcatc ccaaaaccca gtctgggtca gttttgcca gagtgagggt tgtagaacac 360
 gggttctcct gggatctata cctagcccag aatcagttcc aaaagtccaa aaga 414

<210> 112
 <211> 589
 <212> DNA
 <213> Homo sapiens

<400> 112
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 gtgaaggacc caggaagtac agacactggg ggtcaaagaa caagggtagg agtgtcatca 120
 aatgatagtg ttggcagcat gggagctgtg ggtagagagt gagataccta aatttatgat 180
 ttctgggtgg cagtaacttc taggggtgtg ctgtgggagt gggcctctga atgggggtgga 240
 ggagaaaatc attaaagatt agaaaatctt gggatttaga ggatagggtg tgggatgggt 300
 gatacacgtt agtgttgcat ttgccaggg taacgccaa agttggcaga gaaaataata 360
 ctgacctaga ctttaataaa ggatttgga atgacagaga agcaacagta aaaataaggg 420
 ataattagat gtttggtgtg ttgcctggc tgtgtctgtc ctgtgtctgg ccaattatta 480
 caatgtattt aactgtaaa tacatgtaat tcatataata gttttataag tagcaaaatg 540
 tagtttaata aaaaaccatc ttagtcttct tacagaatat ttagttacc 589

<210> 113
 <211> 471
 <212> DNA
 <213> Homo sapiens

<400> 113
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 ggacagtgga ctcggtcaca tccaggatgg tgatcaacag ctgcatcatc ccgcttcctt 120
 ctcaagcgac aattccagag ccttggccac acgggtgctt tatctttcgt attcagaccc 180
 cctgggggtt cagcccctta ctgccttcac tttcctctca ccccttgact catctttcct 240
 gctacttgct acttgagata cctaagatga tgtgtgttat ggagagggtta gagcaccagc 300
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 attcataaag gcagtgtgga ctgcttctgt atgttatcgt gaacctgaat tccttcttag 420
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<210> 114

<211> 1032
 <212> DNA
 <213> Homo sapiens

<400> 114
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 gccaaaggctc ttcccatgcc aaacctcagg cccttatctt ggtatctgtc accaccacc 180
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 caaagaatta gacctgttg gtacccaggc tgggggtcag gtgaggagg agctgggatc 360
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 tatggagagg ttagagcacc agcttcagaa ccacctgtg actttggcct agtcacctga 660
 cattttctaga ctttgggtgc ttcatcaca aaggcagtg ggactgcttg ctgatgttat 720
 cgtgaacctg aattccttct tagagtttct aagtgtcttc tggggattaa ctttttaa 780
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 gagtgagggtg ggaggatcgc ttgagcccag gagttcaatg ctacagagca agacctcaac 1020
 tctttaaaaa aa 1032

<210> 115
 <211> 440
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (428)
 <223> a, c, g or t

<400> 115
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 tgttttaa 120
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 tttagccaga aacctttgaa acatcccaat tggctcttct gattttctct gtttcacaac 240
 ttattctcca cagacaggat actccaaaca gtacccaaag ccattgtctc ttatactttt 300
 caatctataa aatatacata cataagagta tataaaatat attataaagt aaatatccat 360
 gtatccaaac acacaggttt agaactggga acacaatatg caaaagaata atattgggac 420
 cccctancc tcatgtcata 440

<210> 116
 <211> 249

<212> DNA
<213> Homo sapiens

<400> 116
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 atthttgttht caaatcttht taatthcctg aagcaaatac thtcaagcca gttgcaaaat 120
 gctgctthtag aaataatthca tataaacatg cttctctatt taatcacaaag gggagatgtg 180
 gagaatggat gttthtatttht ttcagtagtht thtgccttat aaaaatatta aattgctatt 240
 atgattact 249

<210> 117
 <211> 1017
 <212> DNA
 <213> Homo sapiens

<400> 117
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 ctgatgaaaag tgtccagtat gtgtctgcat gacttgggga cactaagaaa accaaaggga 180
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 cctgctctcc tggagcttat tacgggcctg gctaccaaag ggaaagaggg gaaaatagac 360
 caggagcctt atgctagaac catthtatttht gthtccagtg atgcagacag agataaaact 420
 gcaaatthtaa tgaaacttht acaatcagta caatgthtct ccttaagaac thtgtaaata 480
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 ctcttgaccg ctgacatttht ccaagataaa tcagtggta tagatgtgga gcttgatgtc 660
 tcttcggctc tgggaccaat ccccttggaac aaaagthttht ctgtgtthtct agtattctga 720
 actggctaca gcaactthttht ggaaaataaa ggttacaaaa aaagthtctga caattthgttht 780
 gctthttacat thtcaaattht gtgaaatgta gagataattht tgthttthcaa thtthtgaat 840
 tccctgaagc aaatacttht aagccagtht caaaatgctg cthtagaaat aattcatata 900
 aacatgcttht thtattthaat cacaagggga gatgtggaga atggatgtht thtthttthtca 960
 gtagthtttht ctctataaaa atattthaaat gctattatga thtactaaaga taaaaaa 1017

<210> 118
 <211> 332
 <212> DNA
 <213> Homo sapiens

<400> 118
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 thtcccccttht acacaaaaata acttcgtatg thtthtagtaa gcaggagaac cagcctthtga 120
 actcaggact gthttaaagac caaggctctg gccactgaaa taaaacatct gcaactggca 180
 gattaatgaa aggctctaga aggaaacaaa aaaccaaga gactgctggc agtgatagct 240
 gagthtttagg gggaaaagtht gthtttagtht thtctgtata cthtctgtg tagthttthaa 300
 aatctacagt atthtacact thtcaaaacaaa at 332

<210> 119
 <211> 344
 <212> DNA
 <213> Homo sapiens

<400> 119
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 gttaggagga aaagaattca ataatcctat cagttctgct gtaaaacaaa tgagctatga 120
 aattctgggtg aacactgatt ttatgtctcc attcttgagg aactgttag tttgttttca 180
 tctgtatgcc ttgattagag caaataacct taaatatcct taaggaaact tagatataca 240
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 <212> DNA
 <213> Homo sapiens

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 gaactgtatg taaagaagga cttcacaagt attatagata cccccaacct cagccctttt 420
 cccatgtatc tctttgatca catccctacc tcatagatca cccatgtgct gaagactttc 480
 agttctgtat cttcattcta gatctcctga actcaagatc agaatatctt tctgacttct 540
 gactgtgtat ttctggatgt tatacaagaa cctcagctca aactcagtat tccctaaacc 600
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 gaaagaatag tatgcaaaat atcagagtgc attgtatgta gcaagagtag gtattttc 718

<210> 121
 <211> 2617
 <212> DNA
 <213> Homo sapiens

<400> 121
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 gtggacaatg taagaaaagc tccccggaga agctgtacag aagctgcctc ctacagcagtc 180
 agggccaggt accggagctg tttttaccca aggacagggc cggccccaag tcatcccaga 240
 gctgccatgg caccacctca gtcgggtcct gaggaatcct acacaagcta cttatatcag 300
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tttcagcagg ataaattcca actggattag aaaatgaaat gttaataatg caaataagta 420
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gacttttctaa gcataaaggc aaaaaaaagt cataaaaaatg ctatagcagt ttgagactct 540
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caatgggtgcc tgtttccttt tctttgaaaa tctctggaga aatagttcct cttgctgtgt 660
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<210> 122
 <211> 373
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (74) .. (294)

<223> a, c, g or t

<400> 122

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nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
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tctcaaagag ggcgatgatct tcaagaatta ataaccctct caagtctcta caatctaata 360
caattacctt ggg                                     373
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<210> 123

<211> 308

<212> DNA

<213> Homo sapiens

<400> 123

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gggctgtctc tccctgggtca gacagggagc tccccgaggg cagaggtcct gtctcctcca 180
tcagactggg agccccaca accacaaagc tatgtctact ttcacagaa ggagctccct 240
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cctgtctc                                     308
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<210> 124

<211> 774

<212> DNA

<213> Homo sapiens

<400> 124

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gttcccgaag gccctcggga aagttggtga atgcaaacag caggcagcca gagagcctgc 180
tgcagaggag accagagacg atgccccagg agggcacaga agtgtgcaa agactcagca 240
gtgggaagga gcctgggtccg tgagtgtgag gagataacct gggccctagg cccttcctgc 300
cccaactttc caccacctgg ccagccccct tgcagcgggtg aggccttagca tctctctgct 360
gggtttgtga gagcccagac tgccccagtg aggggtacagg agtactctcc ccaggcagga 420
aggggtgggc gcctccctcc aggtacccaa gaggaaatgt tagcagctga aagccccaga 480
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tggtcagaca gggagctccc cgagggcaga ggtcctgtct cctccatcag actggttagcc 660
cccacaacca caaagctatg tctactttca tcagaaggag ctccctaagt ggggaagggt 720
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<210> 125

<211> 271
 <212> DNA
 <213> Homo sapiens

<400> 125
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 ctgtagtggg ctcctcaaga tacttctagc catgctctgt ttgtgcatgc ttatccctgc 180
 acagacagca gaagctgtct tggccaacaa gaccaggaag cattggtatt tgcagggttaa 240
 ttgaaaaatt catttaaggt ggagaacat a 271

<210> 126
 <211> 1950
 <212> DNA
 <213> Homo sapiens

<400> 126
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 gccagtcctt gcattggcat ctgcagattt gaagaagtag gcccctcttc tagtcttcat 180
 ggactggatt tggcaagaaa agtccttcat cagtcagcca ttcagaaact ctgggaagcc 240
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 cagacagcct tcaacttcag catcttcaga gtctgccttg actttcaagc tgaggccatg 360
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 agagctggag ataccctcct tgcaaacagc agcttgagga tccagcgcct ggtgcacagc 540
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tgtagtgggc tccccaagat acttctagcc atgctctgtt tgtgcatgct tatccctgca 1860
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<210> 127
<211> 209
<212> DNA
<213> Homo sapiens

<400> 127
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tttattattg agaatagtgc ttgttctctg agtactcctg acttagaaaa ggagcatagc 120
cctactaaag gggacttcaa agtagaaatc gtcaataacc ttttacttgc tacagttagt 180
ggcctcaaca tgatgttttt aaagatcct 209

<210> 128
<211> 496
<212> DNA
<213> Homo sapiens

<400> 128
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nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 180
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 240
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nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 360
nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 420
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taaccccaga ttcata 496

<210> 129
<211> 252
<212> DNA
<213> Homo sapiens

<400> 129
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aaaaaaatcc tatccagaca aaataaatca gtgttttata tttttggagc atcagaactt 180
actttaagac ctactggta attcttttagc ctctcacatg tgataaagac attgtgctta 240
cattttttta aa 252

<210> 130

<211> 149
 <212> DNA
 <213> Homo sapiens

<400> 130
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 ctttttgaggg cccagggtgag agggatcact tgcggccagc agagttcaag agcagcccag 120
 gcaacacagg gagacctctt ctctacaaa 149

<210> 131
 <211> 390
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (217)..(273)
 <223> a, c, g or t

<400> 131
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 cgggcccggg cgagctgcag gcctgaaacc caccaccct cttagatgtg tctgtggggc 120
 atagaaatta ctagggttgt cttgggtgtg gcctcaacct gttcaacaac aggtgtgctg 180
 tttccattct ggaaaccagt cctctgtctt ccagaannnn nnnnnnnnnn nnnnnnnnnn 240
 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnntactagg cagggtgagg taacctaaga 300
 gcttttgagg gccaggtga gagggatcac ttgaggccag cagagttcaa gagcagccca 360
 ggcaacacag ggagacctct tctctacaaa 390

<210> 132
 <211> 1079
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (874)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (879)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (885)

<223> a, c, g or t

<220>

<221> unsure

<222> (887)

<223> a, c, g or t

<220>

<221> unsure

<222> (890)

<223> a, c, g or t

<220>

<221> unsure

<222> (894)

<223> a, c, g or t

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<221> unsure

<222> (896)

<223> a, c, g or t

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<221> unsure

<222> (899)

<223> a, c, g or t

<220>

<221> unsure

<222> (921)

<223> a, c, g or t

<220>

<221> unsure

<222> (924)

<223> a, c, g or t

<220>

<221> unsure

<222> (926)

<223> a, c, g or t

<220>

<221> unsure

<222> (931)

<223> a, c, g or t

<220>

<221> unsure
<222> (933)
<223> a, c, g or t

<220>
<221> unsure
<222> (944)
<223> a, c, g or t

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<221> unsure
<222> (950)
<223> a, c, g or t

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<223> a, c, g or t

<220>
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<222> (977)
<223> a, c, g or t

<220>
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<222> (988)
<223> a, c, g or t

<220>
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<222> (993)
<223> a, c, g or t

<220>
<221> unsure
<222> (995)
<223> a, c, g or t

<220>
<221> unsure
<222> (1007)
<223> a, c, g or t

<220>
<221> unsure
<222> (1013)
<223> a, c, g or t

<220>
 <221> unsure
 <222> (1030)
 <223> a, c, g or t

<220>
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 <222> (1037)
 <223> a, c, g or t

<220>
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 <222> (1050)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (1061)
 <223> a, c, g or t

<400> 132
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 tctgcaactcc aggetcagat atgcaactcc ctatttgaca ggtctgcttg aaaacttgct 180
 gggcatccca gaggtaacat ggatctaag gaaggtttga ttttgtcctc caagccagtt 240
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 aagatctagg agttattctt aggttttctt ttacccctc cacatggatc catcagcagg 360
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 gagaattaga agtcacttcc tctgggtgag gcagctagct ccacagcaca gacttaacaa 720
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 acaaattgga aaatncnggg gttaaccnaa ggncnatcat atatttnacc atnaaaaatt 1020
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<210> 133
 <211> 303
 <212> DNA
 <213> Homo sapiens

<220>

<221> unsure
 <222> (295)
 <223> a, c, g or t

<400> 133
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 caaccaggga tttaaaaaat ggtttctggt gtccaggtaa gtttgcataa aaccaaata 180
 aaactgttta atactgggcc cactacatta atctatgggtg ctaacacgtg ctgtgaaccg 240
 tggggtcagg ggctggggga taaagttgca accattttttt ggggggttgg gggangagga 300
 ggg 303

<210> 134
 <211> 546
 <212> DNA
 <213> Homo sapiens

<400> 134
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 gagatcacat ttgcaaattt acattgttta atatcatagc ctcaaaataa attgcatata 180
 aattttaaaa cctatggaga aattgacaaa tccaccaaca ctgtgggaaa tttttaatac 240
 atatctctta gctattaatg cataaagtag gtaaggaaaa ccaataggat gcaaataatt 300
 tgaacaataa aatcaacaac tttgatttag ttgatataca tatacagaca cttgcattta 360
 gtaattggaa aatatacatt attttccaac acacacaaaa aaacacttgc aaaaatgggc 420
 tgtgtcttaa atttttcaaa gaactgatat catacagaac acatgttatg accataatgt 480
 agttacatta gaaaatgtgg cagggattct gattctcctt tctgtgctag ggcatacagt 540
 taaatc 546

<210> 135
 <211> 590
 <212> DNA
 <213> Homo sapiens

<400> 135
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 taataagaga actctataaa aataaagaat ataataaaaa gagatcacat ttgcaaattt 120
 acattgttta atatcatagc ctcaaaataa attgcatata aattttaaaa cctatggaga 180
 aattgacaaa tccaccaaca ctgtgggaaa tttttaatac atatctctta gctattaatg 240
 cataaagtag gtaaggaaaa ccaataggat gcaaataatt tgaacaataa aatcaacaac 300
 tttgatttag ttgatataca tatacagaca cttgcattta gtaattggaa aatatacatt 360
 attttccaac acacacaaaa aaacacttgc aaaaatgggc tgtgtcttaa atttttcaaa 420
 gaactgatat catacagaac acatgttatg accataatgt agttacatta gaaaatgtgg 480
 cagggattct gattctcctt tctgtgctag ggcatacagt taaatcacat tttcaccttc 540
 cttgtattta tgagacttag ctctgtcctt atgaatgtgg gcagaagtga 590

<210> 136
 <211> 165
 <212> DNA
 <213> Homo sapiens

<400> 136
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 gagggtcatc ggaggtgagc ctgggagccc ttagggaggg aggggtgttt gcagctctgg 120
 gcctggcagg ctcacccctt ggccccagtt tcaattctgc atgca 165

<210> 137
 <211> 172
 <212> DNA
 <213> Homo sapiens

<400> 137
 tagttacagt ccttaaatat atgtcttggg tgccctgtgg ctgtgatttt ttaagggaaa 60
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 atagaaaaaa ttccacattt tttcttacag tgctcattca tcagaacctt tt 172

<210> 138
 <211> 809
 <212> DNA
 <213> Homo sapiens

<400> 138
 agtacgtaca gtatcaaaca gtctcctccc ttttctctgt gatttggtct ttctccttag 60
 agaatgtcct ccctccaact ccaaaagaca tgccctctgt gtatagttac agtccttaaa 120
 tatatgtcct ggggtgccctg tggctgtgat tttttaaggg aaattaactt attttaata 180
 aaataaactt aattttaaact aaaattttgt tatctaaagc caaatagaaa aaattccaca 240
 ttttttctta cagtgtcat tcatcagaac cttttttttt tcttcttatt ttttcttttt 300
 ttggggagaa tgggtcctcc ctttggtgag catcaggggg aataagaggt acaaacaggc 360
 ggtgattata cgctcacttg ggagtttggg aactccgggg gcatcattgg gattcccat 420
 ttgtcctcaa gcctccggag tagctaggac atacgggttt tgcaccacaa ggccgggata 480
 aatttcacaaa tttttctcac gagacaaagt ttgggattct tggccccagg attgggacgg 540
 ggtatatcac aaaagaaact atttcagggg cgcttagaga ggctcaagt acacctactt 600
 atcaggggtt tccagtggag agaactgtac cctaccctta ctacctttta agtgggtgcct 660
 ctccctccac ctttaacctt tacacattac ggaactggcg ctatcatttt aaagtcaact 720
 aacctggact ttggacttct ttaacacttc agctccggga tccaaactaa aatcttaggc 780
 aaggcctaag ggacggtaga agtctacgc 809

<210> 139
 <211> 294
 <212> DNA

<213> Homo sapiens

<400> 139

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ggaaattgca agaaaaagat tgggaatcag aacagcagaa aggtatTTTT ggaagggtaa 180
tttactgatt tttcgtttta aattgttgac attgccttcg ccggtggaaa tgaattactt 240
atgtgaatct ggcaggaaca caatttttaa aattagaaaa ttagtcctcc ttat 294
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<210> 140

<211> 1056

<212> DNA

<213> Homo sapiens

<400> 140

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acctaaacac attttaatta tattttgctc atttttggag aaccattcc ctttgacatc 60
tattatgaac attctaaaac tttaaattgt gaaaacaaaa ctctgggaga tagattgtaa 120
ttttattcca tgaggaaggt gttaaaccag ctttgcagtt tgaattttat tcttaaaggc 180
tctgcagttc ttacctggat gtcgaaatga tttttaattt caactgctgt agacctcatc 240
ctgtgggaac tagaaataat gtccaactgc cgtccagtct ggcgacattc cagccgttcc 300
cccacccac gataacgggc tgactcttcc tcaattcatg acagcccatt ctacacataa 360
cctttctcct ctggcaccgg tctctccagc agagagggat cctgcccttc ccttcccact 420
ctccagcata cagaccagca ggaagccaca agagggaaaa acaaaagcct tctgtataag 480
gcctatgaaa ggaccatggg ccagcctcag aatctgctgc ccctacaaac cagtattcct 540
caaatgatag ttccacattt acttaataag gaggactaat tttctaattt taaaaattgt 600
gttcctgcca gattcacata agtaattcat ttccaccggc gaaggcaatg tcaacaattt 660
aaaacgaaaa atcagtaaat tacccttcca aaaatacctt tctgctgttc tgattcccaa 720
tctttttctt gcaatttctt gaaccagaga tggtatcggg acttacatac ataatacata 780
cataaaatca atcctcaagt ctccataatg tctctgttct atatgtttgt tttgcagggg 840
tactatgaat gaaaaagaca atttcatgaa tgcagaaaat ctggggatcg tgtttggggc 900
cactctgatg aggccccctg aggacagcac cctgaccacc ctgcatgata tgcggtacca 960
aaagctgatt gtgcagattt taatagaaaa cgaagacgtt ttatttcta ccatcaggga 1020
aatgagctga atggccccag caccatccaa gttgac 1056
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<210> 141

<211> 968

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (319)

<223> a, c, g or t

<220>

<221> unsure

<222> (497)
 <223> a, c, g or t

<400> 141
 acgagatgtc ccagtaacct aaaattatcc agtcggtctt cttactttac aactaagaaa 60
 aataaggctt agaaagaggg attgccagaa actttggcag ctggattgcc tgtgcttggt 120
 cctctaagcc atacctaaat tctgcagtaa atacttaact ttttaatagg gaaattgctt 180
 caagataact tgaccagtga tacggtaaaa taattagact attggactaa tggtttaaca 240
 caagtggctt taaaaagtct gcttaaaaaa caatttttat ttagaaaaaa tagaaaaata 300
 aaaacatctt caaaatttng gagcctgaag gggctgtttg tttcatatat ggataatctt 360
 tgaaaaggca agtcctgtat gtatttttca tttgttgaaa gaagattggg tatcagtagg 420
 cttgcaaaca taatttgctt ttaagttctt tcaaggtttt atgcaataaa acctattgat 480
 ttggaacttt aaaaaanaaa acaacaaaaa aatactttca gggttttgta atttcaagtg 540
 gttttttaag gggagcaata gtttgccatt taccaaaggc ttctccagat aatttcttaa 600
 atgtttctac ttaaaaaataa aagctattaa taataagctg tcatgggatc catttgaaga 660
 cagggaaaat agaaaatttt tattgtaaag ggaagaactt atccttttaa ttttatggac 720
 taacagagtc tgcaggctct aactcatttc agcctgtcaa atgtgcaatt aaaaatgaat 780
 tttctaattg tattcaaagtg aggcctctata gtgaatacag aatcactctt ctaagttttt 840
 tcccagttaa tttgttttaa agtggtgtac tctcttgcaa gaacgtttaa aagttaagtc 900
 ttgtaactgt taacatctaa tgtattaata taagccattt gttttttacc atttttttaa 960
 ggccgtat 968

<210> 142
 <211> 1466
 <212> DNA
 <213> Homo sapiens

<400> 142
 gaaaatttga gtatctttttt gaaattttta attgaaattt ggatagagat ggttatggag 60
 agaaatcaaa caactggaat agctgtttga tatcacttaa aagtgataaa attttaagtt 120
 gaatctgggc agtttgcaat ggcctatttg taagaaatat caagacttct tgagaaaaat 180
 gaaaagtga tacataaatg cttaaaatct ggtacttctg agttaagggt ttgctctttg 240
 agcttaatcc aatttgggat gatttttcat cctagggtt tttgttttcc ttttttattt 300
 ttattttttc tttttttagg ggaaggggac ttgctttctt ttccaaaaag gtgaatcctt 360
 cttgtaggac ataggtaaaa aaaacaaagc tgaaatatat gttttgaata tagatagcta 420
 attccctggg atataatatc ctttcaattt tttttttttt ttgggcccag tctgcctttg 480
 gatgtttcaa aagtctgaac gagatgtccc agtaacctaa aattatccag tcggtcttct 540
 tactttacaa ctaagaaaaa taaggcttag aaagagggat tgccagaaac tttggcagct 600
 ggattgcctg tgcttggttcc tctaagccat acctaaatc tgcagtaaat acttaacttt 660
 ttaataggga aattgcttca agataacttg accagtgata cggtaaaaata attagactat 720
 tggactaatg gtttaacaca agtggcttta aaaagtctgc ttaaaaaaca atttttattt 780
 agaaaaata gaaaaataaa aacatcttca aaatttagga gcctgaagg gctgtttgtt 840
 tcatatatgg ataatctttg aaaaggcaag tctgtatgt atttttcatt tgttgaaaga 900
 agattgggta tcagtaggct tgcaaacata atttgctttt aagttctttc aaggttttat 960
 gcaataaaac ctattgattt ggaactttta aaaaaaaaac aacaaaaaaa tactttcagg 1020
 gttttgtaat ttcaagtggg tttttaaggg gagcaatagt ttgccattta ccaaaggctt 1080
 ctccagataa tttcttaaat gtttctactt aaaaataaaa gctattaata ataagctgtc 1140

atgggatcca tttgaagaca gggaaaatag aaaattttta ttgtaaaggg aagaacttat 1200
ccttttaatt ttatggacta acagagtctg caggtcttaa ctcatctcag cctgtcaaatt 1260
gtgcaattaa aaatgaattt tctaattgta ttcaaattgag gctctatagt gaatacagaa 1320
tcactcttct aagttttttc ccagtttaatt tgttttaaaag tgttgactc tcttgcaaga 1380
acgttttaaaa gttaagtctt gtaactgtta acatctaattg tattaatata agccatttgt 1440
tttttaccat ttttttaagg ccgat 1466

<210> 143

<211> 306

<212> DNA

<213> Homo sapiens

<220>

<221> unsure

<222> (289)

<223> a, c, g or t

<400> 143

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gtcctgtgat gtgaacctgg ctatcttcaa ttcacaggat agggagtaag acatttcatt 180
ttggccttag gtccaagcca tcttcttcaa tgtagctact actagagagc ccacaatgaa 240
gccaataatt ggctccccat ttggcaattt gtgtcccttt cagaaagang aagggttagt 300
aatcac 306

<210> 144

<211> 494

<212> DNA

<213> Homo sapiens

<400> 144

gacacagcct atctcaaaga gagatgagaa gagccaggcc ccctctcttc ttctccatg 60
ctgttagctc accagggcag atcttgacct caaagaatgc cgtcttccct tctggagctg 120
gtcctgtgat gtgaacctgg ctatcttcaa ttcacaggat agggagtaag acatttcatt 180
ttggccttag gtccaagcca tcttcttcaa tgtagctact actagagagc ccacaatgaa 240
gccaataatt ggctccccat ttggcaattt gtgtcccttt tcagaaagag gaagggttag 300
taatcagcac ttttaagtac cagcatgcag cattaacaag ttctcaaggc ctgcaagcca 360
tagggtttct gtcttccctg tattggcctt gtaatctctg accatgatta gggtaagagt 420
taagagactc ccaggacagg aaacggaaaa catcagattg tgtatggaat gaaccctctt 480
ggctggatgt ggtg 494

<210> 145

<211> 174

<212> DNA

<213> Homo sapiens

<400> 145
 gtggaacaac tctatgccat aaaatttctt atttcacagt taaatgaaca tatttgtgtt 60
 atgtcacttt ctttttagctt gcatttcctt tataggaagg ccatttttagg agtcctgggg 120
 cattttgact caacttctta aatcatttat tctattcaca aaaggtttat tgaa 174

<210> 146
 <211> 445
 <212> DNA
 <213> Homo sapiens

<220>
 <221> unsure
 <222> (371)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (391)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (406)
 <223> a, c, g or t

<220>
 <221> unsure
 <222> (427)
 <223> a, c, g or t

<400> 146
 tgatttttaa caattgtgtg tgtgcaccca gctaaccatc tctacaatcg atctagaaca 60
 ttttcatcac ttcagtgtt ctcgtatatt ccttcccagc taacccatga tccccaaccc 120
 tggccatagg aaccgcgtga tccatcttct atcacttttag attgaatttg tctttcctac 180
 tgttttatat aaagaaatta cctcctttaa gtcctatcaa attcctgatc acccttaaaa 240
 aacaattttt aggtattacc ataaaacctt ccatgacatt ctctgcttta tcttctctgt 300
 gctactttgt ccattcattg ttgcattgta atgtatttct gtacatgtta tatcactaaa 360
 ctgtctcctc nttgaaggga gggacatgtg ntcacatct atttcnaagg cttatacaga 420
 aactganaca tagtagatgc ttact 445

<210> 147
 <211> 734
 <212> DNA
 <213> Homo sapiens

<400> 147

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tgatttttaa caattgtgtg tgtgcaccca gctaaccatc tctacaatcg atctagaaca 60
ttttcatcac ttcagtgtt ctcgtatatt ccttcccagc taacccatga tccccaaccc 120
tgcccatagg aaccgcgtga tccatcttct atcacttttag attgaatttg tctttcctac 180
tgttttatat aaagaaatta cctcctttaa gtcctatcaa attcctgatc acccttaaaa 240
aacaattttt aggtattacc ataaaacctt ccatgacatt ctctgcttta tcttctctgt 300
gctactttgt ccattcattg ttgcattgta atgtatttct gtacatgtta tatcactaaa 360
ctgtctcctc cttgaaggga gggacatgtg ttcactcatc tattttcaag gcttattaca 420
gaaactgaaa catagtagat gcttacttgg gaattattata tctcaaaata gaaaaacacc 480
cagcaaatcg catcttatat tagtctttag aattagtatc aaagcctaata tattatgaca 540
cttgaaacat taaataactt agaaaacaaa gacttaaaag ttttatgata aagccagaaa 600
ctttttatac tgaccatttt taaatactga catttcagat taattggggg cagatgatat 660
atgaaattat agtttatact gtgacttctt aatacttcag ttgtgttaga taaactgata 720
gttcgtcaca tttt 734
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<210> 148

<211> 29

<212> PRT

<213> Homo sapiens

<400> 148

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Met Leu Lys Ile Ile Asp Lys Leu Tyr Phe Ser Tyr Leu His Ser Ala
  1             5             10            15

Asp Ile Leu Cys Asn Thr Glu Ser Tyr Thr Leu Ser Met
      20             25
```

<210> 149

<211> 87

<212> PRT

<213> Homo sapiens

<400> 149

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Met Gly Trp His Glu Ile Gln Ile Pro Val Leu Ile Phe Leu Leu Ala
  1             5             10            15

Val Tyr His Arg Thr Ser His Phe Thr Ser Leu Pro Leu Gly Pro Gln
      20             25            30

Phe Ser Val Phe Leu Ile Tyr Lys Tyr Ser His Pro Ala Phe Arg Gln
      35             40            45

Val Leu Arg Leu Asn Lys Glu Phe Asn Leu Leu Trp Leu His Ile Lys
      50             55            60

His Ile Leu Val Ser Val Cys Leu Val Ile Ser Asn Ala Asn Ile Leu
```

65

70

75

80

Ser Ala Pro Cys Pro Glu Cys

85

<210> 150

<211> 45

<212> PRT

<213> Homo sapiens

<400> 150

Ser Ser Val Ala Leu Ala Leu Gly Ala Leu Thr Val Trp His Ala Val
 1 5 10 15

Leu Ile Ser Arg Gly Glu Thr Ser Ile Glu Arg His Ile Asn Lys Lys
 20 25 30

Glu Arg Arg Arg Leu Gln Ala Lys Gly Arg Val Ser Arg
 35 40 45

<210> 151

<211> 152

<212> PRT

<213> Homo sapiens

<400> 151

Met Val Pro Glu Val Leu Ile Leu Cys His Gly Leu Ala Val Trp Lys
 1 5 10 15

Trp Phe Pro Gly Leu Ala Val Leu Arg Ile Pro Gly Cys Val Thr Gly
 20 25 30

Asn Lys Pro Phe Asn Leu Pro Gly Thr Val Phe Phe Cys Lys Met Arg
 35 40 45

Gly Leu Gly Ala Ser Phe Leu Arg Pro Trp Gly Leu Val Ala Glu Phe
 50 55 60

Ile Ser Pro Thr Pro Cys Pro Ser Ser Tyr Gly Ser Thr His Lys Ala
 65 70 75 80

Phe His Ser His Lys Glu Lys Ala His Lys Val Pro Gln Pro Pro His
 85 90 95

Thr Gln Glu Pro His Leu His Pro Ser Leu Lys Ala Arg Leu Pro Leu
 100 105 110

Pro Gln His Thr Gln Val Leu Leu Gly Leu Pro Ala Leu Phe Ser Ser
 115 120 125

Ser Pro Glu Trp Asn Gly Pro Ala Met Ala Ser Gln Arg Thr Ala Ser
 130 135 140

Trp Gln Ser Trp Glu Trp Val Glu
 145 150

<210> 152
 <211> 29
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (14)

<220>
 <221> UNSURE
 <222> (21)

<400> 152
 Met Gly Leu Arg Val Leu Leu Leu Leu Gly Leu Ser Leu Xaa Met Ser
 1 5 10 15

Gln Lys Pro Leu Xaa Gln Arg Pro Thr Ala Leu Gly Pro
 20 25

<210> 153
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 153
 Met Phe Leu Val Glu His Lys Val Cys Ser Gly Asn Thr Gln Val Ser
 1 5 10 15

Ile Lys Cys Leu Pro Val Val Ser Glu Lys Phe Val Met Lys Tyr Phe
 20 25 30

Gly Asn Arg Cys Ile Val Ser Val Gly Gly Ala Asp Glu Phe
 35 40 45

<210> 154
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 154
 Met Thr His Ser Glu Leu Leu Leu Val Ile Thr Ile Asn His Lys Met
 1 5 10 15
 Pro Gln Gly Pro Arg Val Thr Asn Trp Glu Pro Pro Pro Leu Thr Arg
 20 25 30
 Ile Thr

<210> 155
 <211> 99
 <212> PRT
 <213> Homo sapiens

<400> 155
 Met Asp Ser Phe Leu Leu Leu Arg Gln Arg Glu Gly Gly Lys Arg Asn
 1 5 10 15
 Phe Lys Arg Asn Leu Gln Thr Cys Cys Ala Val Gly Pro Thr Gly Ile
 20 25 30
 His Gly Gly Glu Thr Asn Ser Ile Met Leu Leu Gln Ile Leu Leu Lys
 35 40 45
 Lys Gly Phe Asn Cys Leu Thr Lys Tyr Ser Ser Phe Phe His Leu Leu
 50 55 60
 Thr Leu Gln Pro Asn Gln Val Pro His Thr Thr Gly Arg Cys Arg Glu
 65 70 75 80
 Ile Pro Gln Pro Glu Lys Ile Ile His Ala Gly Gln Arg Gln Lys Phe
 85 90 95
 Thr Pro Gly

<210> 156
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 156

Met Gln Phe Leu Leu Cys Leu Ser Leu Leu Asp Phe Phe Ser Ser Thr
1 5 10 15

Tyr Lys His Ala Val Met Ser Pro Asn Gln Lys Lys Cys Lys Asn Pro
20 25 30

Phe Ser Pro Met Leu Thr His His Pro Ala Val Val Leu Phe Leu Pro
35 40 45

Phe Thr Leu Leu Tyr Tyr Ser
50 55

<210> 157

<211> 59

<212> PRT

<213> Homo sapiens

<400> 157

Met Leu Gln Val Asp Val Cys Thr Leu Met Val Arg Thr Trp Ser Ser
1 5 10 15

Trp Pro Cys Trp Val Phe Ala Lys Glu Thr Val Leu Cys Ser Trp Gly
20 25 30

Arg Phe His His Leu Ile Arg Ala Val Val Pro Thr Trp Cys Ser Leu
35 40 45

Asp His Leu Tyr Lys Met Phe Ile Gly Gln Gly
50 55

<210> 158

<211> 62

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (41)

<220>

<221> UNSURE

<222> (57)

<400> 158

Met Thr Lys Arg Met Glu Lys Cys Leu Asn Ile Tyr Lys Arg Leu Asp
 1 5 10 15

Val Tyr Arg Gln Ile Val Ser Lys Gly His Arg Ile Val Arg Asn Ser
 20 25 30

Val Ile Leu Phe Cys Val Ile Asn Xaa Pro Phe Leu Tyr Pro Phe Thr
 35 40 45

Leu Ile Ile Asp Ile His His Phe Xaa Val Ile Ile Gln Leu
 50 55 60

<210> 159
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 159
 His Leu Asn Arg Phe Ala Asn Ser Val Lys Val Phe Thr Arg Arg His
 1 5 10 15

Ala Phe Val Lys Lys Phe Phe Arg Gly Ser Ala Cys Asn Cys Ala Glu
 20 25 30

Ser Ala Leu Leu Ser Ser Gln Leu Ala His Cys Val Gly Arg Trp
 35 40 45

<210> 160
 <211> 43
 <212> PRT
 <213> Homo sapiens

<400> 160
 Met Gln Glu Ala Glu Gly Arg Leu Asn Lys Pro Gln Gly Gly Arg Val
 1 5 10 15

Gly Ala Glu Arg Val Gly Asn Ile Phe Phe Leu Leu Leu Asn Ser Arg
 20 25 30

Lys Ala Lys Thr Gln Ser Lys Leu Phe Leu Ser
 35 40

<210> 161
 <211> 62
 <212> PRT

Met Phe Gly Ile Leu Glu Lys Ser Ser Lys Tyr Val His Leu Glu Gly
1 5 10 15

Asp Glu Tyr Ser Leu Ile Asn Lys Arg Asn Lys Tyr Leu Asn Ser Leu
35 40 45

Thr Ser Ile Leu Asn Arg Phe Cys Gly Gln Met Arg Leu Pro
50 55 60

<211> 78

<212> PRT

<213> Homo sapiens

Met Thr Pro Ala Leu Ala Ala Trp His Val Leu Ile His Pro Asn Val
1 5 10 15

Cys Phe Leu Ala Pro Ala Asp Ser Leu Glu Gly Ser Ile Lys Glu Asp
20 25 30

Trp Val Asn Met Asp Leu Glu Asn Ala His Leu Gln Arg Glu Asn Gly

Gly Trp Ala Ala Phe Pro Ser Pro Ala Pro Val Pro Gly Ile Trp Pro
50 55 60

Arg Ser Ala Ser Val Cys Phe Gly Ala Lys Leu Gln Ala Pro
65 70 75

<211> 51

<212> PRT

<213> Homo sapiens

Met Ser Ser Trp Ile Pro Phe Ile Ile Thr Pro Leu Phe Ser Gly Ile
1 5 10 15

Arg Leu Glu Ala Trp Cys Gln Phe Tyr Ser Ser Leu Tyr Pro Phe Ile

20 25 30

His Phe Leu Ser Ile Leu Phe Pro Lys Tyr Phe Phe Ser Ala Pro Ser

35 40 45

Pro Ala Ala

50

<210> 164

<211> 27

<212> PRT

<213> Homo sapiens

<400> 164

Met Gly Ile Ile Pro Lys Cys Met Phe Leu Leu Gln Ser Arg Leu Met

1 5 10 15

Gly Val Ile Thr Asn Thr Ser Leu Leu Leu His

20 25

<210> 165

<211> 52

<212> PRT

<213> Homo sapiens

<400> 165

Met Lys Val Leu Lys Tyr His Asn Glu Ala Cys Gly Phe Tyr Ser Val

1 5 10 15

Val Trp Met Leu Ser Ser Ser Ile Pro Trp Met Pro Thr Gly Met His

20 25 30

Cys Leu Ile Leu Glu Phe Lys Arg Trp Pro Gln Thr Val Arg Leu Ser

35 40 45

Met Trp Pro His

50

<210> 166

<211> 47

<212> PRT

<213> Homo sapiens

<400> 166

Met Gly Arg Lys Ser Thr Asn Lys Thr Ala Cys Thr His Ile Asn Thr

1 5 10 15
Tyr Val Ser Thr Asn Asp Lys Leu Tyr Leu Tyr Arg Ala Trp Glu Gly
20 25 30
Ser Tyr Ile Thr Leu His Val Ser His Pro Pro His Thr Ser Arg
35 40 45

<210> 167
<211> 42
<212> PRT
<213> Homo sapiens

<400> 167
Met Cys Trp Gly Tyr Phe Ser Ile Ser Lys Lys Phe Pro Asn Leu Thr
1 5 10 15
Ser Val Leu Met Asn Leu Gly Thr Asp Leu Ala Val Arg Pro Thr Ser
20 25 30
Ile Phe Pro Thr Asp Ser Ile Leu Leu Glu
35 40

<210> 168
<211> 55
<212> PRT
<213> Homo sapiens

<400> 168
Met Asn Lys Ile Lys Gly Lys Ser Val Leu Phe Tyr Met Pro Glu Thr
1 5 10 15
Ser Arg Ile Phe Arg Lys Val Gln Phe Lys Glu Asn Gln Ala Ala Leu
20 25 30
Asp Ser Thr Asn Lys Asn Val Ser Leu Ser Glu Glu Leu Val Asn Gln
35 40 45
Gly Thr Gln Ser Ala Phe Ser
50 55

<210> 169
<211> 24
<212> PRT
<213> Homo sapiens

<400> 169

Met Met His Met Gln Leu Ile Ser Glu Phe Ser Cys Leu Cys Cys Phe
1 5 10 15

Phe Phe Leu Gly Ile Tyr Ile Lys
20

<210> 170

<211> 68

<212> PRT

<213> Homo sapiens

<400> 170

Met Ile His Leu Ser Glu Val Ser Gly His Leu Lys Glu Arg Lys Gly
1 5 10 15

Lys Ala Ser Cys Gln Lys Gln Lys His Val Leu Tyr Lys Arg Phe Lys
20 25 30

Asn Gln Asn Gly Ile Arg Leu Ser Asn Cys Lys Arg Gln Ser Ser Ala
35 40 45

Phe Lys Ile Leu Arg Lys Asn Asn Val Tyr Ile Lys Ile Phe Ile Ile
50 55 60

Ile Phe Asn Phe
65

<210> 171

<211> 100

<212> PRT

<213> Homo sapiens

<400> 171

Ser Phe Ala Phe Phe Phe Ser Leu Arg Gln Ser Leu Thr Leu Ser Pro
1 5 10 15

Arg Leu Glu Cys Ser Gly Thr Ile Ser Ala His Cys Asn Leu Cys Leu
20 25 30

Leu Gly Ser Ser Asn Ser Ser Ala Ser Ala Ser Gln Val Ala Gly Ile
35 40 45

Thr Gly Thr His His His Ala Gln Val Ile Phe Ile Phe Phe Ile Glu
50 55 60

Met Gly Phe Arg His Ile Gly Gln Ala Gly Leu Lys Leu Leu Thr Ser
65 70 75 80

Gly Asp Pro Pro Ala Ser Ala Ser Glu Ser Ala Gly Ile Thr Gly Val
85 90 95

Arg His His Thr
100

<210> 172
<211> 58
<212> PRT
<213> Homo sapiens

<400> 172
Met Glu Cys Leu Ser Ile Asn Leu Thr Lys Asn Val Ser Tyr Leu Tyr
1 5 10 15

Thr Gly Pro Leu Asn Thr Ser Glu Thr Lys Leu Lys Ser Tyr Leu Ile
20 25 30

Gly Asn Gln Phe Pro Pro Arg Phe Ile Tyr Arg Val Ser Glu Ile Pro
35 40 45

Ile Lys Ile Ser Ala Arg Ser Leu Arg Asn
50 55

<210> 173
<211> 47
<212> PRT
<213> Homo sapiens

<400> 173
Met Asp Lys Glu Glu Ser Ala Val Leu Val Gly Gly Ser Ile Leu Pro
1 5 10 15

Asp Lys Leu Phe Leu Val Gly Phe Thr Asp Thr Ser Pro Asp Leu Leu
20 25 30

Pro Ala Ala Thr Val Cys Phe Tyr Asp Ala Cys His His Asp Ile
35 40 45

<210> 174
<211> 106

Met Ser Ser Ser Pro Leu Val Ser Ala Lys Phe Ser Phe Leu Phe His
 1 5 10 15
 Glu Gly Arg Ala Pro Ser Leu Phe His Pro Leu Met Thr Ser Gln Pro
 20 25 30
 Leu Glu Phe Cys Leu Met Met Asp Phe Ser Glu Ile Cys Leu Cys Asn
 35 40 45
 Glu Asp Lys Asp Ser Gly
 50

<210> 177
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 177
 Met Arg Pro Leu Lys Met Ile Arg Thr Ala Lys Lys Leu Phe Val Tyr
 1 5 10 15
 Leu Gly Ser Tyr
 20

<210> 178
 <211> 66
 <212> PRT
 <213> Homo sapiens

<400> 178
 Met Met Tyr Tyr Pro Asp Asp Leu Trp Asn Leu Leu Arg Asn Arg Asp
 1 5 10 15

Cys Val Ala Phe Leu Ile Met Gly Thr Gly Pro Ser Leu Leu Arg Leu
 20 25 30

Pro Met Cys Val Gly Thr Glu Leu Leu Trp His Ser Ser Ser Arg Leu
 35 40 45

Met Glu Leu Ser Ser Ser Glu Ala Ser Trp Val Val His Ala Asn Leu
 50 55 60

Val Leu
 65

<210> 179
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 179
 Met Cys Val Ile Tyr Gln Arg Gly Ile Cys Asp Glu Lys Lys Asn Leu
 1 5 10 15
 Lys Cys Pro Gln Met Phe Gln Leu Ser Glu Thr Glu Lys Thr Leu Thr
 20 25 30
 Ser Val Phe Arg Ile Ile Val Ser Asn Ile Leu Lys Ile Asp Val Ser
 35 40 45
 Ser Val Met Ile Phe Leu Arg Leu His Gln Arg Thr Ser Leu Asn Leu
 50 55 60
 Ser Val Ile Gln Asn Gln
 65 70

<210> 180
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 180
 Met Asn Pro Val Cys Trp Val Gly Phe Gly Glu Val Asn Ile Glu His
 1 5 10 15
 Met Glu Phe Lys Tyr Ile Glu Met Asp Thr Val Ile Glu Met
 20 25 30

<210> 181
 <211> 55
 <212> PRT
 <213> Homo sapiens

<400> 181
 Met His Ala Cys Gly Ser Leu Arg Leu Asp Lys Asp Pro Thr Thr Leu
 1 5 10 15
 Leu Cys Val Asn Thr Arg Cys Thr Arg Ser His Leu Pro Gly Ala Gly
 20 25 30
 Gly Trp Trp Arg Lys Val Lys Ser Gln Gln Thr Val His Arg Thr Tyr

35

40

45

Ser Ala Thr Gly Lys Lys Ser
50 55

<210> 182

<211> 16

<212> PRT

<213> Homo sapiens

<400> 182

Met Pro Ala Leu Arg Glu Ala Phe Pro Gln Ala Pro Leu Ala Leu Ala
1 5 10 15

<210> 183

<211> 48

<212> PRT

<213> Homo sapiens

<400> 183

Met Thr Phe Gln Lys Leu Met Ile Leu His Ile His Asp Gln Met Phe
1 5 10 15

Ser Leu Met Glu Ala Ser Asp Val Cys Ser His Gln Ile Arg Phe Lys
20 25 30

Met Ser Val Ser Ser Lys Ser Ser Lys Thr Ser Pro Ser His Gln Lys
35 40 45

<210> 184

<211> 55

<212> PRT

<213> Homo sapiens

<400> 184

Met Ser Val Leu Lys Arg Phe Leu Lys Pro Ser Leu Ser Ile Ala Lys
1 5 10 15

Thr Cys Tyr Val His Tyr Pro Pro Asn Ser Tyr Leu Lys Thr Thr Pro
20 25 30

Lys Met Leu Tyr Phe Val Phe Lys Val Arg Glu Glu Asn Arg Gly Glu

35

40

45

Val Phe Leu Cys Ser Phe Pro
50 55

<210> 185

<211> 14

<212> PRT

<213> Homo sapiens

<400> 185

Met Trp Leu Arg Asp Leu Asn Tyr Lys Ile Ala Arg Leu Asp
1 5 10

<210> 186

<211> 42

<212> PRT

<213> Homo sapiens

<400> 186

Met Met Phe Phe Tyr Ile Phe Cys Ser Met Gly Leu Leu Ile Pro Phe
1 5 10 15

Ser Thr Leu Lys Met Leu Leu Ile Val Phe Pro Leu Ser Leu Phe Pro
20 25 30

Lys Arg Asn Leu Leu Ser Phe Leu Ser Leu
35 40

<210> 187

<211> 100

<212> PRT

<213> Homo sapiens

<400> 187

Leu Phe Phe Phe Leu Arg Trp Ser Leu Ala Leu Val Thr Gln Ala Gly
1 5 10 15

Val Gln Val Val Asp Ile Gly Ser Leu Gln Pro Leu Pro Pro Gly Phe
20 25 30

Lys Gln Phe Ser Cys Pro Ser Leu Leu Ser Ser Trp Asp Tyr Arg His
35 40 45

Gly Pro Pro Arg Pro Ala Asn Phe Phe Val Phe Leu Val Glu Met Gly

50

55

60

Phe His His Val Gly Gln Ala Gly Pro Glu Leu Leu Thr Ser Ser Asp
65 70 75 80

Pro Pro Ala Leu Ala Ser Gln Ser Ala Gly Ile Thr Gly Val Ser His
85 90 95

Leu Thr Trp Pro
100

<210> 188

<211> 106

<212> PRT

<213> Homo sapiens

<400> 188

Met Ser Cys Leu Trp Pro Ser Leu Asp Leu Pro Ser Leu Ser His Ser
1 5 10 15

Lys Gln Ser Ser Ser Gln Ala Glu Gly Gln Val Thr Ser His Thr Arg
20 25 30

Gln Arg Phe Pro Asp Gly Ala His Leu His Pro Ser Leu Thr Leu Val
35 40 45

Leu Ser Gln Asp Ala Pro Leu Arg Leu Ala Pro Pro Thr Leu Cys Leu
50 55 60

Leu Cys Tyr Trp Ala Ser Leu Pro Ser Pro Arg Thr Pro Glu Leu Leu
65 70 75 80

Asn Ala Gly Gln Lys Ser Ile Pro Asp Leu Gln Gln Arg His Phe Asp
85 90 95

Ile Lys Glu Met Ala Leu Asp Phe Cys Leu
100 105

<210> 189

<211> 46

<212> PRT

<213> Homo sapiens

<400> 189

Met Val Ile Ser Arg Ile Ser Ile Leu Arg Lys Met Thr Lys Phe His
1 5 10 15

Lys Phe Cys Ser Gln Leu Thr Glu Pro Gly Arg Arg Thr Gln Pro Lys
 20 25 30

Glu Asn Pro Trp Ser Leu Tyr Asp Thr Asp Trp Leu Glu Lys
 35 40 45

<210> 190

<211> 46

<212> PRT

<213> Homo sapiens

<400> 190

Met Ser Arg Val Arg Ala Glu Lys Pro Gly Arg Val Ala Lys Leu Ala
 1 5 10 15

Ala Cys Arg Pro Leu Pro Arg Leu Gln Met Ser Gly Ser Ile Pro Leu
 20 25 30

His Lys Cys Lys Glu Lys Ala Ser Met Pro Pro Leu Trp Ser
 35 40 45

<210> 191

<211> 50

<212> PRT

<213> Homo sapiens

<400> 191

Met Arg Pro Ala Arg Leu Gly Pro Arg Cys Ser Asp Leu Asp Phe Gly
 1 5 10 15

Leu Val Leu Ser Ser Trp Leu Arg Leu Ala Arg Cys Pro Leu Glu Ser
 20 25 30

Ser Phe Gly Phe Ala Phe Phe Val Cys Leu Phe Ser Pro Asn Phe Cys
 35 40 45

Gln Thr
 50

<210> 192

<211> 76

<212> PRT

<213> Homo sapiens

<210> 195
 <211> 17
 <212> PRT
 <213> Homo sapiens

<400> 195
 Met Leu Gln His Leu Arg Leu Thr Ile Trp Gly Glu Cys Val Trp Val
 1 5 10 15

Phe

<210> 196
 <211> 51
 <212> PRT
 <213> Homo sapiens

<400> 196
 Met Arg Asn Val Ser Leu Ile Ser Cys Glu Asp Ala Asp Phe Thr Glu
 1 5 10 15

Ala Leu Cys Asn Ile Trp Phe Val His Gln Thr Met Leu Ile Asp Cys
 20 25 30

Arg Ser His Leu Leu Pro Arg Trp Leu Thr Lys Thr Val Gly Ser Leu
 35 40 45

Leu Lys Pro
 50

<210> 197
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 197
 Met Ser His Gly Gln Val Leu Gly Asp Val Ala Gly Lys Val Gly His
 1 5 10 15

Ala Leu Gly Thr Glu Asp Gln Thr Phe Ala Val Glu Val Leu Lys Glu
 20 25 30

Thr Thr Pro Phe Phe Arg Ala Ser Ser Gly Pro Thr Gly Asp Pro Trp
 35 40 45

Cys Pro Asp His Lys Ile Gln Ser Lys Pro Val Ser Leu Ser
 50 55 60

<210> 198
 <211> 400
 <212> PRT
 <213> Homo sapiens

<400> 198
 Met Leu Leu Leu Val Thr Ser Leu Leu Leu Cys Glu Leu Pro His Pro
 1 5 10 15

Ala Phe Leu Leu Ile Pro Glu Lys Ser Asp Leu Arg Thr Val Ala Pro
 20 25 30

Ala Ser Ser Leu Asn Val Arg Phe Asp Ser Arg Thr Met Asn Leu Ser
 35 40 45

Trp Asp Cys Gln Glu Asn Thr Thr Phe Ser Lys Cys Phe Leu Thr Asp
 50 55 60

Lys Lys Asn Arg Val Val Glu Pro Arg Leu Ser Asn Asn Glu Cys Ser
 65 70 75 80

Cys Thr Phe Arg Glu Ile Cys Leu His Glu Gly Val Thr Phe Glu Val
 85 90 95

His Val Asn Thr Ser Gln Arg Gly Phe Gln Gln Lys Leu Leu Tyr Pro
 100 105 110

Asn Ser Gly Arg Glu Gly Thr Ala Ala Gln Asn Phe Ser Cys Phe Ile
 115 120 125

Tyr Asn Ala Asp Leu Met Asn Cys Thr Trp Ala Arg Gly Pro Thr Ala
 130 135 140

Pro Arg Asp Val Gln Tyr Phe Leu Tyr Ile Arg Asn Ser Lys Arg Arg
 145 150 155 160

Arg Glu Ile Arg Cys Pro Tyr Tyr Ile Gln Asp Ser Gly Thr His Val
 165 170 175

Gly Cys His Leu Asp Asn Leu Ser Gly Leu Thr Ser Arg Asn Tyr Phe
 180 185 190

Leu Val Asn Gly Thr Ser Arg Glu Ile Gly Ile Gln Phe Phe Asp Ser
 195 200 205

Leu Leu Asp Thr Lys Lys Ile Glu Arg Phe Asn Pro Pro Ser Asn Val
210 215 220

Thr Val Arg Cys Asn Thr Thr His Cys Leu Val Arg Trp Lys Gln Pro
225 230 235 240

Arg Thr Tyr Gln Lys Leu Ser Tyr Leu Asp Phe Gln Tyr Gln Leu Asp
245 250 255

Val His Arg Lys Asn Thr Gln Pro Gly Thr Glu Asn Leu Leu Ile Asn
260 265 270

Val Ser Gly Asp Leu Glu Asn Arg Tyr Asn Phe Pro Ser Ser Glu Pro
275 280 285

Arg Ala Lys His Ser Val Lys Ile Arg Ala Ala Asp Val Arg Ile Leu
290 295 300

Asn Trp Ser Ser Trp Ser Glu Ala Ile Glu Phe Gly Ser Asp Asp Gly
305 310 315 320

Asn Leu Gly Ser Val Tyr Ile Tyr Val Leu Leu Ile Val Gly Thr Leu
325 330 335

Val Cys Gly Ile Val Leu Gly Phe Leu Phe Lys Arg Phe Leu Arg Ile
340 345 350

Gln Arg Leu Phe Pro Pro Val Pro Gln Ile Lys Asp Lys Leu Asn Asp
355 360 365

Asn His Glu Val Glu Asp Glu Ile Ile Trp Glu Glu Phe Thr Pro Glu
370 375 380

Glu Gly Lys Gly Tyr Arg Glu Glu Val Leu Thr Val Lys Glu Ile Thr
385 390 395 400

<210> 199

<211> 10

<212> PRT

<213> Homo sapiens

<400> 199

Met Asp Arg Met Glu Lys Arg Gln Thr Asp

1 5 10

<210> 200
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 200
 Met Cys Tyr Ala Thr Leu His Gln Ile Asn Phe Leu Gln Thr Val Leu
 1 5 10 15

Val Pro Gly Leu
 20

<210> 201
 <211> 31
 <212> PRT
 <213> Homo sapiens

<400> 201
 Met Cys Leu Cys Cys Trp Leu Tyr Trp Glu Glu Tyr Gly Pro Leu Ser
 1 5 10 15

Leu Thr Gln Glu Phe His Val Phe Cys Gln Asp Thr Leu His Gly
 20 25 30

<210> 202
 <211> 54
 <212> PRT
 <213> Homo sapiens

<400> 202
 Met Asn His Ser Leu Ser Ala Phe Gln Arg Ala Leu Gln Val Leu Ile
 1 5 10 15

Phe Lys Met Ser Val Tyr Ala Ser Gly Pro Arg Leu Glu Lys Lys Val
 20 25 30

Gly Asn Lys Leu Glu Gly Gly Arg Lys Gln Glu Arg Asn Val Thr Tyr
 35 40 45

Met Ala Asp Glu Gly Phe
 50

<210> 203
 <211> 35
 <212> PRT
 <213> Homo sapiens

<400> 203
 Met Ile Lys Ala Tyr His Pro Tyr Phe Glu Asn Phe Asn His Arg Ala
 1 5 10 15
 Gln Tyr Val Ser Asn Lys Leu Lys Lys Tyr Ser Phe Gln Leu His Phe
 20 25 30
 Asp Gly His
 35

<210> 204
 <211> 76
 <212> PRT
 <213> Homo sapiens

<400> 204
 Met Lys Met Val Asn Arg His Met Lys Trp Lys Ser Ser Ala Leu Ser
 1 5 10 15
 Asp Leu Val Cys Ile Ser Thr Glu Ile Gln Ala Gly Leu Thr Arg His
 20 25 30
 Thr Ser His Asn Phe Gln Cys His Cys Thr Ile Ile Leu Thr Val Val
 35 40 45
 Ser Phe Phe Gln Ser Thr Glu Lys Gln Ala Asp Lys Pro Arg His Leu
 50 55 60
 Asn Val Thr Trp Leu Met Thr Leu Ile Ser Thr Leu
 65 70 75

<210> 205
 <211> 94
 <212> PRT
 <213> Homo sapiens

<400> 205
 Met Glu Gly Gln Asp Ser Leu Arg Asp Val Gly Ala Leu Ser His Leu
 1 5 10 15
 Ala His Thr Asp Arg Ser Trp Leu Gly Arg Ala Gly Val Ser Ala Trp

20 25 30
 Arg Pro Ser Ala Ala Gly Asp Pro Gly Phe His Glu Val Gly Gly Val
 35 40 45
 His Ala Gly Thr Ser Gln Leu Ala Gly Pro Gly Gly His Pro Gly Gly
 50 55 60
 Ala Gly Ala Trp Gly His Glu Phe Thr Lys Val Ala Gln Gly Gln Glu
 65 70 75 80
 Glu Thr Val Val Ala Glu Gly Pro Leu Val Glu Ala Trp Ala
 85 90

<210> 206

<211> 53

<212> PRT

<213> Homo sapiens

<400> 206

Met Pro Gln Asp Gln Asp Pro Pro Arg Glu Glu His Ala Ala Leu Arg
 1 5 10 15

Val Leu Phe Pro Arg Val Pro Leu Ala Val Pro His Gln Leu Gly Gly
 20 25 30

Glu Leu Glu Arg Ala Asp Arg Arg Thr Gly Phe Ser Ala Cys Ala Asn
 35 40 45

Ile Leu Thr Cys Pro
 50

<210> 207

<211> 75

<212> PRT

<213> Homo sapiens

<400> 207

Trp Ser Thr Pro Pro Phe Asp Pro Arg Phe Pro Ser Gln Asn Gln Ile
 1 5 10 15

Arg Asn Cys Tyr Gln Asn Phe Leu Asp Tyr His Arg Cys Leu Lys Thr
 20 25 30

Arg Thr Arg Arg Gly Lys Ser Thr Gln Pro Cys Glu Tyr Tyr Ser Cys
 35 40 45

Val Tyr His Ser Leu Cys Pro Ile Ser Trp Val Glu Ser Trp Asn Glu
 50 55 60

Gln Ile Lys Asn Gly Ile Phe Ala Gly Lys Ile
 65 70 75

<210> 208
 <211> 44
 <212> PRT
 <213> Homo sapiens

<400> 208
 Met Arg Val Leu Arg Lys Glu Ser Pro Ser Arg His Val Leu Lys Asn
 1 5 10 15

Met Cys Leu Ile Arg Asn Pro Arg Glu Gly Thr Ala Ala Asn Asn Glu
 20 25 30

Met Glu Ser Ala Thr Gly Glu Glu Lys Gly Asn Arg
 35 40

<210> 209
 <211> 83
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (80)
 <223> a, c, g or t

<400> 209
 Met His Arg Lys Lys Lys Leu Glu Ser Phe Leu Leu Leu Ile Pro Pro
 1 5 10 15

Pro Tyr Leu Pro Leu Thr Lys Met Trp Gly Glu Pro Arg Phe Glu Gly
 20 25 30

Ser Thr Gly Pro Cys Pro Gln Asp Ser Met Glu Gln Pro Val Thr Lys
 35 40 45

Gln Gly Ile Ser Leu Lys Ser Cys Leu Pro Lys Lys Ile Lys Leu Pro
 50 55 60

Arg Leu Ala Leu His Pro Ser Pro Pro Arg Ser Phe Pro Leu Lys Xaa

80

<213> Homo sapiens

<213> Homo sapiens

<210> 212

<211> 38
 <212> PRT
 <213> Homo sapiens

<400> 212
 Met Met Pro Gly Pro Ala Ala Leu Ile Pro Pro Thr Ala Thr Ala Cys
 1 5 10 15
 Leu Leu Val Val Ala Arg Gly Ser Ser Val Pro Lys Asp Ser Ser Leu
 20 25 30
 Phe Cys Ile Thr Val His
 35

<210> 213
 <211> 88
 <212> PRT
 <213> Homo sapiens
 <400> 213
 Met Ser Leu Leu Asp Ala Ser Ser Leu Lys Pro Tyr Asp Ser Phe Leu
 1 5 10 15
 Leu Ala Val Leu Phe Leu Thr Arg Asp Asn Lys Gly Phe Ala Ser Gln
 20 25 30
 Val Cys Met Ala Lys Lys Val Ser Thr Ser Val Asn Gly Ser Phe Leu
 35 40 45
 Met Thr Ser Gln Gln Pro Leu Val Lys Asp Val Ile Glu Ile Val Gln
 50 55 60
 Arg Leu Gly Ser Val Cys Phe Val Leu Leu Leu Lys Ser Phe His Gly
 65 70 75 80
 Ser Lys Leu Phe Leu Ser Ile Val
 85

<210> 214
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 214
 Met Val Ile Arg Glu Leu Leu Gly Gly Gln Lys Tyr Pro Asn Pro Val
 1 5 10 15

Gln Gly Arg Asp Pro Trp Thr Val Thr Val Leu Ser Ala Phe Gly Arg
 20 25 30

Glu Gly Asp Ser Glu Ala Gln Thr Arg Ile
 35 40

<210> 215

<211> 49

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (46)

<400> 215

Met Pro Asn Cys Ser Val Glu Leu Arg Gly Tyr Tyr Tyr Asn Phe Val
 1 5 10 15

His Tyr Tyr Lys Tyr Phe Ile Leu Val Val Tyr Ser Thr Ala Asp Ser
 20 25 30

Asn Gln Lys Thr Lys Ile Gln Lys Tyr Tyr Ile Leu Glu Xaa Ile Ile
 35 40 45

Met

<210> 216

<211> 37

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (6)

<220>

<221> UNSURE

<222> (8)

<400> 216

Met Glu Met Leu Glu Xaa Lys Xaa Thr Ile Ile Asp Ile Val Ser Leu
 1 5 10 15

Leu Ala Leu Ser Gly Asp Leu Thr Gln Leu Arg Lys Ser Leu Val Thr
 20 25 30

Leu Lys Ile Cys Arg
 35

<210> 217

<211> 72

<212> PRT

<213> Homo sapiens

<400> 217

Met Gly Ser Tyr Gly Leu Leu Phe Lys Phe Tyr Gly Ala Ile Phe Thr
 1 5 10 15

Ser Val Ala Gln Gly Trp Ser Val Leu His Leu Arg Lys Val Ser Leu
 20 25 30

Gly Lys Cys Pro Cys His Pro Ser His Ser Arg Gln Ala Ala Ser Ser
 35 40 45

Ala Phe Ser Ser Ser Ser Ser His Ala Trp Ser Ser Pro Phe Val Ile
 50 55 60

Phe Ser Ser Leu Thr Pro Ser Leu
 65 70

<210> 218

<211> 49

<212> PRT

<213> Homo sapiens

<400> 218

Met Gly Ser Phe Ser Pro Leu Thr Tyr His Leu Gly His Trp Asn Met
 1 5 10 15

Ala Ala Cys Gly Ser Val Cys Glu Gly Pro Gly Asp Gly Gln Gly Gly
 20 25 30

Ser Ala Leu Phe Cys Phe Tyr Gln His Cys Ser Met Asn Val Phe Leu
 35 40 45

Thr

<210> 219
 <211> 34
 <212> PRT
 <213> Homo sapiens

<400> 219
 Met Leu Thr Arg His His Pro Leu Asn Val Leu Leu His Arg Leu Cys
 1 5 10 15
 Leu Asn Trp Leu Glu Glu Asn Asn Tyr Pro Arg Asn Thr Asp Tyr Leu
 20 25 30

Ile Phe

<210> 220
 <211> 34
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (17)
 <400> 220
 Met Leu Leu Leu Pro Ala Thr Phe Leu Pro Thr Ser His Ala Arg Pro
 1 5 10 15
 Xaa Gln Pro His Cys His Thr Thr Cys Leu Ile Thr Ser His Val Leu
 20 25 30

Thr His

<210> 221
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 221
 Met Gly Pro Ser Ser Cys Leu Leu Leu Ile Leu Ile Pro Leu Leu Gln
 1 5 10 15
 Leu Ile Asn Leu Gly Ser Thr Gln Cys Ser Leu Asp Ser Val Met Asp
 20 25 30

Lys Lys Ile Lys Asp Val Leu Asn Ser Leu Glu Tyr Ser Pro Ser Pro
 35 40 45

Ile Ser Lys Lys Leu Ser Cys Ala Ser Val Lys Ser Gln Gly Arg Pro
 50 55 60

Ser Ser Cys Pro Ala Gly Met Ala Val Thr Gly Cys Ala Cys Gly Tyr
 65 70 75 80

Gly Cys Gly Ser Trp Asp Val Gln Leu Glu Thr Thr Cys His Cys Gln
 85 90 95

Cys Ser Val Val Asp Trp Thr Thr Ala Arg Cys Cys His Leu Thr
 100 105 110

<210> 222

<211> 111

<212> PRT

<213> Homo sapiens

<400> 222

Met Gly Pro Ser Ser Cys Leu Leu Leu Ile Leu Ile Pro Leu Leu Gln
 1 5 10 15

Leu Ile Asn Leu Gly Ser Thr Gln Cys Ser Leu Asp Ser Val Met Asp
 20 25 30

Lys Lys Ile Lys Asp Val Leu Asn Ser Leu Glu Tyr Ser Pro Ser Pro
 35 40 45

Ile Ser Lys Lys Leu Ser Cys Ala Ser Val Lys Ser Gln Gly Arg Pro
 50 55 60

Ser Ser Cys Pro Ala Gly Met Ala Val Thr Gly Cys Ala Cys Gly Tyr
 65 70 75 80

Gly Cys Gly Ser Trp Asp Val Gln Leu Glu Thr Thr Cys His Cys Gln
 85 90 95

Cys Ser Val Val Asp Trp Thr Thr Ala Arg Cys Cys His Leu Thr
 100 105 110

<210> 223

<211> 83

<212> PRT

<213> Homo sapiens

<400> 223

Met Asn Val Glu Ala Arg Glu Gln Cys Asp Val Gln Leu Ser Asp Leu
1 5 10 15

Thr Trp His Leu Ile Trp Leu Glu Val Pro Pro Leu Leu Ser Val Pro
20 25 30

Trp Leu Trp Ala His Gly Leu Ala Glu Pro Ser Tyr Gly Phe Arg Phe
35 40 45

Thr Cys Tyr Asn Ile Gln Arg Gln Cys Thr Ser Leu Pro Arg Lys Leu
50 55 60

Cys Ser Arg His Pro Phe Val Thr Leu Ile Ser Ile Met Asp Thr Thr
65 70 75 80

Thr Phe Tyr

<210> 224

<211> 132

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (3)

<220>

<221> UNSURE

<222> (11)

<220>

<221> UNSURE

<222> (14)

<400> 224

Met Asp Xaa Thr Arg Val His Asp Asp Glu Xaa Val Ile Xaa Gly Asp
1 5 10 15

Val Phe Val His Glu Val Thr Pro Gly Pro His Arg Trp Val Leu Val
20 25 30

Arg Pro Phe Cys Leu Glu Val Arg Ala Val Phe Leu Arg Leu Trp Tyr
35 40 45

Tyr Arg Gly Glu Lys Glu Glu Glu Leu Glu Val Arg Glu Arg Ser Cys
50 55 60

Arg Leu Gly Arg Cys Asp Gln Gly Gln Arg Asp Gly Val Gln Glu Ala
65 70 75 80

Cys Ser Ser Val Ser Cys Ser Leu Arg Gln Glu Val Ser Pro Ser Ser
85 90 95

Gln Leu Asp Met Arg Ser Leu Leu Gly Val Pro Leu Ala Glu Val Glu
100 105 110

Pro Val Ala Gln His Pro Pro Asn Glu Gly Arg Gly Arg His Leu Gly
115 120 125

Gln Cys Leu Leu
130

<210> 225

<211> 38

<212> PRT

<213> Homo sapiens

<400> 225

Met Ile Asn Asn Ser Asn His Asn Asn Ser Ser Ser Ser Lys Leu Arg
1 5 10 15

Ala Ser Tyr Val Gln Ala Phe Ser Lys His Phe Thr Cys Ile Thr Pro
20 25 30

Leu Val Ile Thr Thr Pro
35

<210> 226

<211> 58

<212> PRT

<213> Homo sapiens

<400> 226

Met Ser Thr Phe Thr Val Leu Lys Asn Thr His Gln Leu Lys Lys Asn
1 5 10 15

Thr Leu Phe Pro Phe Leu Gly His Leu Asn Leu Arg Glu Gln Leu Leu
20 25 30

Tyr Lys Asn Asp Ile Lys Ile Ile His Phe Gly Ser Met Phe Leu Thr

35

40

45

Val Leu Arg Gly Cys Met Val Lys Leu Lys
 50 55

<210> 227

<211> 26

<212> PRT

<213> Homo sapiens

<400> 227

Met His Met His Ile Phe Leu Cys Leu Tyr Asn Leu Cys Asn Ile Cys
 1 5 10 15

Glu Cys Asn Thr Phe Ser Phe Phe Leu Leu
 20 25

<210> 228

<211> 47

<212> PRT

<213> Homo sapiens

<400> 228

Met Leu Asp Val Met Arg Gln Val Ala Arg Ser Trp Leu Thr Ala Met
 1 5 10 15

Glu Arg Leu Leu Leu Pro Ala Ala Val Arg Phe Ser Ala Ile Trp Leu
 20 25 30

Ala Gly Gln Phe Ala Met Ala Trp Leu Leu Gln Leu Ile Leu Gly
 35 40 45

<210> 229

<211> 53

<212> PRT

<213> Homo sapiens

<400> 229

Met Gly Asn Ile Gly Glu Thr Leu Ser Leu Lys Lys Lys Arg Arg Ala
 1 5 10 15

Gly Gly Glu Ser Val Lys Asp Pro Gly Ser Thr Asp Thr Gly Gly Gln
 20 25 30

Arg Thr Arg Val Gly Val Ser Ser Asn Asp Ser Val Gly Ser Met Gly

35

40

45

Ala Val Gly Arg Glu
50

<210> 230

<211> 80

<212> PRT

<213> Homo sapiens

<400> 230

Met Val Ile Asn Ser Cys Ile Ile Pro Leu Pro Ser Gln Ala Thr Ile
1 5 10 15

Pro Glu Pro Trp Pro His Gly Ala Cys Ile Phe Arg Ile Gln Thr Pro
20 25 30

Trp Gly Ser Ser Pro Leu Leu Pro Ser Leu Ser Ser His Pro Leu Thr
35 40 45

His Leu Ser Cys Tyr Leu Ser Leu Glu Ile Pro Lys Met Met Cys Val
50 55 60

Met Glu Arg Leu Glu His Gln Leu Gln Asn His Pro Val Thr Leu Ala
65 70 75 80

<210> 231

<211> 40

<212> PRT

<213> Homo sapiens

<400> 231

Met Phe Gln Arg Phe Leu Ala Lys Val Thr Val Trp Met Val Val Pro
1 5 10 15

Leu Thr Lys Thr Ala Met Asn Ala Lys Arg Ala Ser Phe Val Gly Arg
20 25 30

His Lys Ile Ile Phe Arg Ile Cys
35 40

<210> 232

<211> 24
 <212> PRT
 <213> Homo sapiens

<400> 232
 Met Leu Leu Tyr Leu Ile Thr Arg Gly Asp Val Glu Asn Gly Cys Phe
 1 5 10 15

 Ile Phe Ser Val Val Phe Ala Leu
 20

<210> 233
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 233
 Met Pro Pro Arg Gly Leu Pro His Phe Ser Pro His Pro Thr Arg Gln
 1 5 10 15

 Phe Leu Phe Leu Phe Pro Leu His Thr Lys
 20 25

<210> 234
 <211> 37
 <212> PRT
 <213> Homo sapiens

<400> 234
 Met Ser Tyr Glu Ile Leu Val Asn Thr Asp Phe Met Ser Pro Phe Leu
 1 5 10 15

 Arg Thr Leu Leu Val Cys Phe His Leu Tyr Ala Leu Ile Arg Ala Asn
 20 25 30

 Asn Leu Lys Tyr Pro
 35

<210> 235
 <211> 40
 <212> PRT
 <213> Homo sapiens

<400> 235
 Met Gly Lys Gly Leu Arg Leu Gly Val Ser Ile Ile Leu Val Lys Ser

1 5 10 15

Phe Phe Thr Tyr Ser Ser Lys Asp Val Asn Tyr Phe Ser Ile His Ser
20 25 30

Asn Ile Lys Ala Val Phe His Phe
35 40

<210> 236

<211> 40

<212> PRT

<213> Homo sapiens

<400> 236

Met Glu Glu Thr Gly Pro Leu Pro Ser Gly Ser Ser Leu Ser Asp Gln
1 5 10 15

Gly Glu Thr Ala Leu Ala Leu Gly Asn Ser Arg Ser Asp Gly Gly Arg
20 25 30

Gln Ser Ser Ser Ser Met Asn Ala
35 40

<210> 237

<211> 50

<212> PRT

<213> Homo sapiens

<400> 237

Met His Lys Gln Ser Met Ala Arg Ser Ile Leu Arg Ser Pro Leu Gln
1 5 10 15

Gln Ile Pro Pro Lys Gly Glu Ala Gly Arg Trp Arg Trp Ala Glu Ala
20 25 30

Ser Cys Val Leu His Thr Phe Ser Thr Ile Leu Asp Phe Leu Phe Phe
35 40 45

Phe Phe
50

<210> 238

<211> 49

<212> PRT

<213> Homo sapiens

<400> 238

Ser Ser Trp Gly Asp Ser Phe Ala Val Ser Ala Ala Trp Ala Arg Lys
1 5 10 15

Gly Ile Glu Glu Trp Ile Gly Arg Gln Arg Cys Pro Gly Gly Val Ser
20 25 30

Gly Pro Arg Gln Leu Arg Leu Ala Gly Thr Ile Gly Arg Ser Thr Arg
35 40 45

Glu

<210> 239

<211> 54

<212> PRT

<213> Homo sapiens

<400> 239

Met Leu Arg Pro Leu Thr Val Ala Ser Lys Arg Leu Leu Thr Ile Ser
1 5 10 15

Thr Leu Lys Ser Pro Leu Val Gly Leu Cys Ser Phe Ser Lys Ser Gly
20 25 30

Val Leu Arg Glu Gln Ala Leu Phe Ser Ile Ile Asn Leu Ile Asn Thr
35 40 45

Asp Trp Gln Lys Gln His
50

<210> 240

<211> 23

<212> PRT

<213> Homo sapiens

<400> 240

Met Lys Lys Lys Ser Tyr Pro Asp Lys Ile Asn Gln Cys Phe Ile Phe
1 5 10 15

Leu Glu His Gln Asn Leu Leu
20

<210> 241

<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> UNSURE
<222> (6) .. (7)

<220>
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<222> (27) .. (31)

<220>
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<222> (38) .. (40)

<220>
<221> UNSURE
<222> (43)

<220>
<221> UNSURE
<222> (45)

<220>
<221> UNSURE
<222> (47)

<400> 241
Met Val Lys Tyr Met Xaa Xaa Leu Xaa Leu Thr Pro Xaa Phe Ser Asn
1 5 10 15

Leu Leu Gly Thr Leu Lys Xaa Arg Lys Val Xaa Xaa Xaa Xaa Xaa Pro
20 25 30

Arg Lys Arg Asn Phe Xaa Xaa Xaa Pro Pro Xaa Leu Xaa Lys Xaa Arg

10016157.103101

35

40

45

Cys His Phe Leu His Ile Asp Leu Gln Arg Val
50 55

<210> 242

<211> 55

<212> PRT

<213> Homo sapiens

<220>

<221> UNSURE

<222> (53)

<400> 242

Met Val Ser Gly Val Gln Val Ser Leu His Lys Thr Lys Ile Lys Leu
1 5 10 15

Phe Asn Thr Gly Pro Thr Thr Leu Ile Tyr Gly Ala Asn Thr Cys Cys
20 25 30

Glu Pro Trp Gly Gln Gly Leu Gly Asp Lys Val Ala Thr Ile Phe Trp
35 40 45

Gly Val Gly Gly Xaa Gly Gly
50 55

<210> 243

<211> 75

<212> PRT

<213> Homo sapiens

<400> 243

Met Val Ile Thr Cys Val Leu Tyr Asp Ile Ser Ser Leu Lys Asn Leu
1 5 10 15

Arg His Ser Pro Phe Leu Gln Val Phe Phe Cys Val Cys Trp Lys Ile
20 25 30

Met Tyr Ile Phe Gln Leu Leu Asn Ala Ser Val Cys Ile Cys Ile Ser
35 40 45

Thr Lys Ser Lys Leu Leu Ile Leu Leu Phe Lys Leu Phe Ala Ser Tyr
50 55 60

Trp Phe Ser Leu Pro Thr Leu Cys Ile Asn Ser

65

70

75

<210> 244

<211> 17

<212> PRT

<213> Homo sapiens

<400> 244

Met Ser Trp Val Pro Cys Gly Cys Asp Phe Leu Arg Glu Ile Asn Leu

1

5

10

15

Phe

<210> 245

<211> 30

<212> PRT

<213> Homo sapiens

<400> 245

Met Tyr Val Ser Pro Asp Asn Ile Ser Gly Ser Gly Asn Cys Lys Lys

1

5

10

15

Lys Ile Gly Asn Gln Asn Ser Arg Lys Val Phe Leu Glu Gly

20

25

30

<210> 246

<211> 57

<212> PRT

<213> Homo sapiens

<400> 246

Arg Val Thr Met Asn Glu Lys Asp Asn Phe Met Asn Ala Glu Asn Leu

1

5

10

15

Gly Ile Val Phe Gly Pro Thr Leu Met Arg Pro Pro Glu Asp Ser Thr

20

25

30

Leu Thr Thr Leu His Asp Met Arg Tyr Gln Lys Leu Ile Val Gln Ile

35

40

45

Leu Ile Glu Asn Glu Asp Val Leu Phe

50

55

<210> 247
 <211> 70
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (38)

<400> 247
 Met Phe Ala Ser Leu Leu Ile Thr Asn Leu Leu Ser Thr Asn Glu Lys
 1 5 10 15

Tyr Ile Gln Asp Leu Pro Phe Gln Arg Leu Ser Ile Tyr Glu Thr Asn
 20 25 30

Ser Pro Phe Arg Leu Xaa Asn Phe Glu Asp Val Phe Ile Phe Leu Phe
 35 40 45

Phe Leu Asn Lys Asn Cys Phe Leu Ser Arg Leu Phe Lys Ala Thr Cys
 50 55 60

Val Lys Pro Leu Val Gln
 65 70

<210> 248
 <211> 36
 <212> PRT
 <213> Homo sapiens

<400> 248
 Met Arg Arg Ala Arg Pro Pro Leu Phe Phe Leu His Ala Val Ser Ser
 1 5 10 15

Pro Gly Gln Ile Leu Thr Ser Lys Asn Ala Val Phe Pro Ser Gly Ala
 20 25 30

Gly Pro Val Met
 35

<210> 249
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 249

Met Ser Leu Ser Phe Ser Leu His Ser Phe Tyr Arg Lys Ala Ile Leu
 1 5 10 15

Gly Val Leu Gly His Phe Asp Ser Thr Ser
 20 25

<210> 250
 <211> 43
 <212> PRT
 <213> Homo sapiens

<220>
 <221> UNSURE
 <222> (6)

<400> 250
 Met Ser Leu Pro Ser Xaa Arg Arg Gln Phe Ser Asp Ile Thr Cys Thr
 1 5 10 15

Glu Ile His Tyr Asn Ala Thr Met Asn Gly Gln Ser Ser Thr Glu Lys
 20 25 30

Ile Lys Gln Arg Met Ser Trp Lys Val Leu Trp
 35 40